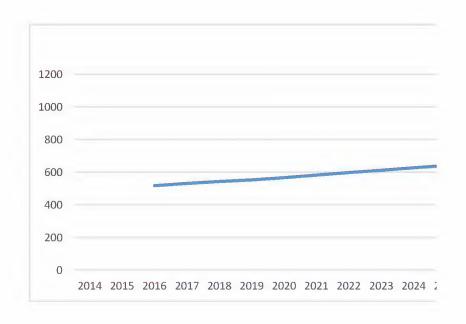
Historical data (in RED) from EIA State Energy Data System (SEDS)
North Carolina profile
https://www.eia.gov/state/print.php?sid=NC



Trends starting in 2016 are based on AEO 2017 in the referenced tabs (GDP and state-wide CO2 from the South Atlanti- https://www.eia.gov/outlooks/aeo/data/browser/
GDP (\$ billion)
CO2 emissions - state wide (MMTCO2)
CO2 emissions - electric power (MMTCO2)
GDP (\$ billion)

2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 20

c region tab,

2014 2015

127 112.7

57 53.8

)47 2048 2049

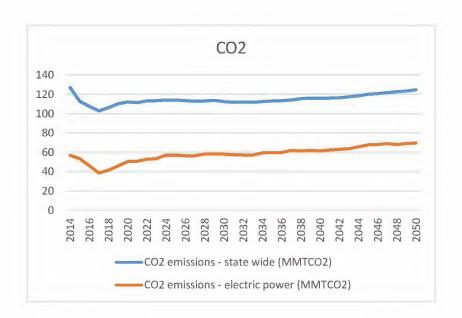
State-wide CO2 emissions approximation for 2015 (in BLUE) based on EIA's AEO 2016 trend in South Atlantic region emiss

electric power CO2 from the Virgina/Carolina region of the NEMS electricity market module)

2016 \$517.9 107.5 46.4



2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
\$532.3	\$544.2	\$554.1	\$567.4	\$583.0	\$598.7	\$613.2	\$628.0	\$641.4	\$652.6	\$664.7	\$678.4	\$691.6
102.8	106.4	110.2	112.3	111.7	113.1	113.5	114.3	114.1	113.6	113.0	113.3	113.7
38.9	41.8	46.0	50.8	50.9	53.0	53.8	57.2	57.2	56.8	56.7	58.2	58.7



2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
\$704.3	\$716.9	\$730.1	\$745.6	\$762.8	\$779.9	\$796.8	\$814.4	\$833.8	\$851.5	\$868.0	\$885.3	\$903.6
112.6	112.0	112.1	112.1	112.5	113.3	113.7	114.4	115.5	116.1	116.0	116.1	116.4
58.3	57.6	57.4	57.3	59.6	59.9	59.9	62.2	61.7	62.2	61.7	62.6	63.2

	2043	2044	2045	2046	2047	2048	2049	2050
9	\$922.6	\$941.1	\$959.4	\$977.5	\$994.9	\$1,012.1	\$1,030.8	\$1,049.5
	117.5	118.6	120.1	120.8	121.8	122.9	123.6	124.7
	63.9	65.8	67.9	68.2	69.2	68.4	69.1	69.8

Energy Consumption by Sector and Source

https://www.eia.gov/outlooks/aeo/data/browser/#/?id=2-AEO2017®ion=1-5&cases=ref_no_cpp&start=2015&end=2 Mon Oct 02 2017 15:10:51 GMT-0400 (Eastern Daylight Time)

Source: U.S. Energy Information Administration

Residential

Propane

Kerosene

Distillate Fuel Oil

Petroleum and Other Liquids Subtotal

Natural Gas

Renewable Energy

Electricity

Delivered Energy

Electricity Related Losses

Total

Commercial

Propane

Motor Gasoline

Kerosene

Distillate Fuel Oil

Residual Fuel Oil

Petroleum and Other Liquids Subtotal

Natural Gas

Coal

Renewable Energy

Electricity

Delivered Energy

Electricity Related Losses

Total

Industrial

Liquefied Petroleum Gases and Other

Motor Gasoline

Distillate Fuel Oil

Residual Fuel Oil

Petrochemical Feedstocks

Other Petroleum

Petroleum and Other Liquids Subtotal

Natural Gas

Natural-Gas-to-Liquids Heat and Power

Lease and Plant Fuel

Natural Gas Liquefaction for Export

Natural Gas Subtotal

Metallurgical Coal

Other Industrial Coal

Coal-to-Liquids Heat and Power

Net Coal Coke Imports

full name

Energy Use: Residential: Propane: Reference case without Clean Power Plan Energy Use: Residential: Kerosene: Reference case without Clean Power Plan

Energy Use: Residential: Distillate Fuel Oil: Reference case without Clean Power Plan Energy Use: Residential: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Residential: Natural Gas: Reference case without Clean Power Plan

Energy Use: Residential: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Residential: Electricity: Reference case without Clean Power Plan

Energy Use: Residential: Delivered Energy: Reference case without Clean Power Plan

Energy Use: Residential: Electricity Related Losses: Reference case without Clean Power Plan

Energy Use: Residential: Total: Reference case without Clean Power Plan

Energy Use: Commercial: Propane: Reference case without Clean Power Plan

Energy Use: Commercial: Motor Gasoline: Reference case without Clean Power Plan

Energy Use: Commercial: Kerosene: Reference case without Clean Power Plan

Energy Use: Commercial: Distillate Fuel Oil: Reference case without Clean Power Plan

Energy Use: Commercial: Residual Fuel Oil: Reference case without Clean Power Plan

Energy Use: Commercial: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Commercial: Natural Gas: Reference case without Clean Power Plan

Energy Use: Commercial: Coal: Reference case without Clean Power Plan

Energy Use: Commercial: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Commercial: Electricity: Reference case without Clean Power Plan

Energy Use: Commercial: Delivered Energy: Reference case without Clean Power Plan

Energy Use: Commercial: Electricity Related Losses: Reference case without Clean Power Plan

Energy Use: Commercial: Total: Reference case without Clean Power Plan

Energy Use: Industrial: Liquefied Petroleum Gases: Reference case without Clean Power Plan

Energy Use: Industrial: Motor Gasoline: Reference case without Clean Power Plan

Energy Use: Industrial: Distillate Fuel Oil: Reference case without Clean Power Plan

Energy Use: Industrial: Residual Fuel Oil: Reference case without Clean Power Plan

Energy Use: Industrial: Petrochemical Feedstocks: Reference case without Clean Power Plan

Energy Use: Industrial: Other Petroleum: Reference case without Clean Power Plan

Energy Use: Industrial: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Industrial: Natural Gas: Reference case without Clean Power Plan

Energy Use: Industrial: Natural-Gas-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Industrial: Lease and Plant Fuel: Reference case without Clean Power Plan

Energy Use: Industrial: Liquefaction: Reference case without Clean Power Plan

Energy Use: Industrial: Natural Gas Subtotal: Reference case without Clean Power Plan

Energy Use: Industrial: Metallurgical Coal: Reference case without Clean Power Plan

Energy Use: Industrial: Other Industrial Coal: Reference case without Clean Power Plan

Energy Use: Industrial: Coal-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Industrial: Net Coal Coke Imports: Reference case without Clean Power Plan

api key	units	2015	2016	2017
2-AEO2017.2.				
2-AEO2017.3.ref_no_cpp-d120816a	quads	0.062241	0.065449	0.065101
2-AEO2017.4.ref_no_cpp-d120816a	quads	0.001686	0.001686	0.002186
2-AEO2017.5.ref no cpp-d120816a	quads	0.037383	0.029301	0.039634
2-AEO2017.6.ref_no_cpp-d120816a	quads	0.10131	0.096436	0.106921
2-AEO2017.7.ref_no_cpp-d120816a	quads	0.452122	0.455025	0.458016
2-AEO2017.8.ref_no_cpp-d120816a	quads	0.081493	0.075523	0.073916
2-AEO2017.9.ref_no_cpp-d120816a	quads	1.217717	1.237169	1.199449
2-AEO2017.10.ref_no_cpp-d120816a	quads	1.852642	1.864153	1.838301
2-AEO2017.11.ref_no_cpp-d120816a	quads	2.037339	1.827734	1.656002
2-AEO2017.12.ref_no_cpp-d120816a	quads	3.889981	3.691887	3.494303
2-AEO2017.14.				
2-AEO2017.15.ref_no_cpp-d120816a	quads	0.03469	0.043716	0.040908
2-AEO2017.16.ref_no_cpp-d120816a	quads	0.011596	0.012281	0.010982
2-AEO2017.17.ref_no_cpp-d120816a	quads	0.000345	0.001492	0.000879
2-AEO2017.18.ref_no_cpp-d120816a	quads	0.055022	0.066763	0.072153
2-AEO2017.19.ref_no_cpp-d120816a	quads	0.000629	0.005826	0.003546
2-AEO2017.20.ref_no_cpp-d120816a	quads	0.102281	0.130078	0.128467
2-AEO2017.21.ref_no_cpp-d120816a	quads	0.385673	0.385234	0.389083
2-AEO2017.22.ref_no_cpp-d120816a	quads	0.004709	0.005306	0.005466
2-AEO2017.23.ref_no_cpp-d120816a	quads	0.019821	0.019821	0.019821
2-AEO2017.24.ref_no_cpp-d120816a	quads	1.058333	1.066628	1.049862
2-AEO2017.25.ref_no_cpp-d120816a	quads	1.570817	1.607067	1.592699
2-AEO2017.26.ref_no_cpp-d120816a	quads	1.770676	1.575785	1.449477
2-AEO2017.27.ref_no_cpp-d120816a	quads	3.341493	3.182852	3.042177
2-AEO2017.29.				
2-AEO2017.30.ref_no_cpp-d120816a	quads	0.022726	0.02286	0.023695
2-AEO2017.31.ref_no_cpp-d120816a	quads	0.037787	0.03793	0.038028
2-AEO2017.32.ref_no_cpp-d120816a	quads	0.147187	0.139953	0.142946
2-AEO2017.33.ref_no_cpp-d120816a	quads	0.006917	0.009979	0.007641
2-AEO2017.34.ref_no_cpp-d120816a	quads			
2-AEO2017.35.ref_no_cpp-d120816a	quads	0.213537	0.214851	0.219504
2-AEO2017.36.ref_no_cpp-d120816a	quads	0.428154	0.425572	0.431814
2-AEO2017.37.ref_no_cpp-d120816a	quads	0.528367	0.544196	0.563058
2-AEO2017.38.ref_no_cpp-d120816a	quads			
2-AEO2017.39.ref_no_cpp-d120816a	quads	0.065375	0.048132	0.043256
2-AEO2017.40.ref_no_cpp-d120816a	quads			
2-AEO2017.41.ref_no_cpp-d120816a	quads	0.593741	0.592328	0.606314
2-AEO2017.42.ref_no_cpp-d120816a	quads	0.050271	0.048649	0.050798
2-AEO2017.43.ref_no_cpp-d120816a	quads	0.118699	0.114714	0.112819
2-AEO2017.45.ref_no_cpp-d120816a	quads			
2-AEO2017.46.ref_no_cpp-d120816a	quads	-0.003795	-0.000351	0.000879

2018	2019	2020	2021	2022	2023	2024	2025
0.064311	0.063695	0.06332	0.063171	0.062921	0.062686	0.062574	0.062511
0.002056	0.001941	0.00186	0.001803	0.00175	0.001703	0.00166	0.001616
0.038448	0.037165	0.036147	0.035283	0.034473	0.03372	0.033031	0.032328
0.104815	0.102801	0.101327	0.100257	0.099145	0.098109	0.097264	0.096455
0.459201	0.461534	0.464107	0.466539	0.468607	0.470979	0.473464	0.47541
0.075248	0.077446	0.077985	0.077748	0.077135	0.076335	0.075452	0.074632
1.206019	1.201375	1.198654	1.203169	1.213133	1.225204	1.238183	1.251013
1.845283	1.843156	1.842074	1.847713	1.858019	1.870627	1.884363	1.897509
1.747523	1.876913	1.975037	1.983285	2.019488	2.021652	2.038564	2.035024
3.592806	3.720069	3.81711	3.830998	3.877508	3.892279	3.922928	3.932533
0.040471	0.041065	0.041778	0.042493	0.042954	0.043586	0.04437	0.045193
0.011226	0.011203	0.011317	0.011449	0.011654	0.011945	0.01224	0.01251
0.000851	0.000893	0.000956	0.001022	0.001077	0.001137	0.001196	0.001247
0.069437	0.066629	0.064565	0.062871	0.062746	0.062566	0.062366	0.062049
0.002204	0.002207	0.002694	0.003382	0.003189	0.003063	0.003006	0.002879
0.124189	0.121997	0.121312	0.121217	0.12162	0.122297	0.123179	0.123879
0.388875	0.388614	0.388878	0.390502	0.391565	0.392907	0.394054	0.394898
0.005622	0.00577	0.005923	0.006082	0.006083	0.006085	0.006088	0.006087
0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821
1.053456	1.053549	1.05432	1.058377	1.066215	1.076122	1.087075	1.098002
1.591964	1.589751	1.590253	1.596	1.605304	1.617232	1.630217	1.642686
1.526459	1.645963	1.737216	1.744613	1.774915	1.775659	1.789778	1.786122
3.118423	3.235714	3.327469	3.340613	3.38022	3.392891	3.419995	3.428808
0.023568	0.024846	0.0254	0.025975	0.026801	0.027548	0.028087	0.028491
0.038411	0.038668	0.038777	0.03873	0.038757	0.038882	0.038993	0.039017
0.148476	0.153803	0.156872	0.159252	0.162158	0.165385	0.16728	0.168404
0.007638	0.008532	0.009354	0.009245	0.009255	0.00955	0.009761	0.009768
0.223711	0.227025	0.219258	0.219844	0.222268	0.226924	0.229517	0.230888
0.441805	0.452874	0.449661	0.453046	0.459239	0.468289	0.473638	0.476568
0.587526	0.606652	0.614199	0.628811	0.644341	0.655027	0.66282	0.668458
0.044195	0.04634	0.048048	0.051234	0.052414	0.053866	0.054177	0.05335
0.015712	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.647433	0.679385	0.688639	0.706438	0.723148	0.735287	0.743391	0.748201
0.049531	0.049998	0.052145	0.055259	0.057084	0.058425	0.059382	0.059686
0.115157	0.118024	0.119845	0.122903	0.126212	0.128366	0.128931	0.128675
0.000389	0.000683	0.000745	0.00098	0.000843	0.001077	0.001133	0.00122

2026	2027	2028	2029	2030	2031	2032
0.062443	0.062332	0.062195	0.062114	0.062011	0.061809	0.061587
0.001574	0.001534	0.001498	0.001463	0.001427	0.00139	0.001354
0.031648	0.031018	0.030413	0.029832	0.02923	0.028638	0.028079
0.095664	0.094884	0.094106	0.093409	0.092668	0.091836	0.09102
0.477048	0.477784	0.478839	0.480378	0.481653	0.482654	0.483666
0.07377	0.072761	0.07151	0.070374	0.069327	0.068467	0.067703
1.263663	1.276922	1.290072	1.302646	1.3135	1.32489	1.336038
1.910145	1.922351	1.934527	1.946806	1.957147	1.967848	1.978427
2.023986	1.999407	2.027761	2.051602	2.023579	2.006622	2.035194
3.934131	3.921758	3.962288	3.998408	3.980726	3.974469	4.01362
0.045923	0.046515	0.047275	0.048055	0.048668	0.049066	0.049617
0.012785	0.013086	0.013401	0.013687	0.013952	0.014211	0.014466
0.001301	0.001353	0.001417	0.001471	0.001519	0.001565	0.001609
0.061758	0.061544	0.061436	0.061316	0.061103	0.060829	0.060556
0.002806	0.002824	0.002918	0.002898	0.002814	0.002719	0.002619
0.124572	0.125323	0.126448	0.127428	0.128055	0.12839	0.128865
0.395546	0.395199	0.395858	0.39737	0.398876	0.400461	0.402647
0.006085	0.006085	0.006083	0.006084	0.006082	0.006081	0.006081
0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821
1.107499	1.117842	1.12869	1.139787	1.146034	1.153474	1.162192
1.653523	1.66427	1.6769	1.69049	1.698869	1.708227	1.719606
1.773862	1.75032	1.774097	1.795108	1.765581	1.747002	1.770372
3.427384	3.41459	3.450997	3.485597	3.464449	3.455229	3.489978
0.028996	0.02916	0.029291	0.029523	0.029812	0.030079	0.03029
0.03898	0.038787	0.038751	0.038755	0.038689	0.038606	0.038554
0.169164	0.169724	0.16997	0.170336	0.170789	0.171051	0.170882
0.009905	0.010075	0.010183	0.010185	0.010077	0.010029	0.009803
0.232362	0.23478	0.238557	0.242636	0.24668	0.251159	0.254252
0.479407	0.482526	0.486752	0.491435	0.496047	0.500925	0.50378
0.673733	0.676048	0.675891	0.677798	0.680487	0.681842	0.685332
0.050814	0.044511	0.040603	0.039123	0.036387	0.035323	0.034802
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.750941	0.746952	0.742888	0.743314	0.743268	0.743558	0.746527
0.059408	0.05887	0.058248	0.057834	0.05839	0.057597	0.058555
0.128014	0.127575	0.125986	0.124283	0.122847	0.120682	0.119623
0.00125	0.001376	0.001456	0.001547	0.001669	0.001768	0.001915

2033	2034	2035	2036	2037	2038	2039
0.061424	0.061341	0.061295	0.061224	0.061177	0.061115	0.061064
0.001321	0.001291	0.00126	0.001229	0.001201	0.001172	0.001145
0.027564	0.027081	0.026608	0.026135	0.025684	0.025245	0.024828
0.090309	0.089713	0.089163	0.088588	0.088061	0.087532	0.087036
0.484353	0.485387	0.486267	0.487188	0.487509	0.487877	0.48886
0.066635	0.065712	0.064791	0.0642	0.063538	0.062796	0.062199
1.347224	1.359392	1.372168	1.385308	1.397839	1.411273	1.42476
1.988521	2.000204	2.012389	2.025285	2.036948	2.049479	2.062855
2.041619	2.051775	2.075847	2.102567	2.104885	2.119548	2.125898
4.03014	4.051979	4.088236	4.127852	4.141833	4.169027	4.188753
0.050378	0.051013	0.051743	0.052203	0.052852	0.05339	0.053842
0.01478	0.015053	0.015343	0.015579	0.015871	0.01616	0.016422
0.001673	0.001722	0.001777	0.001817	0.001874	0.001926	0.001973
0.060435	0.060316	0.060207	0.059994	0.059846	0.059762	0.059661
0.002758	0.002723	0.002765	0.002643	0.002705	0.002752	0.002775
0.130024	0.130826	0.131835	0.132235	0.133148	0.13399	0.134673
0.40495	0.40767	0.410189	0.412671	0.414427	0.4164	0.418938
0.00608	0.006079	0.006077	0.006075	0.006072	0.006069	0.006066
0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821
1.171383	1.181442	1.192261	1.203604	1.215457	1.228035	1.24138
1.732258	1.745839	1.760184	1.774407	1.788926	1.804315	1.820878
1.775145	1.78319	1.803679	1.826784	1.830252	1.844349	1.852275
3.507403	3.529029	3.563863	3.601191	3.619177	3.648664	3.673153
0.030389	0.0307	0.03095	0.031204	0.031409	0.031673	0.032006
0.038478	0.038529	0.038588	0.038637	0.038685	0.038777	0.038861
0.17097	0.171892	0.173077	0.173886	0.17472	0.175776	0.176594
0.009759	0.00954	0.009539	0.009391	0.009436	0.009401	0.009418
0.257662	0.261935	0.266421	0.270851	0.275349	0.280384	0.285338
0.507258	0.512597	0.518576	0.523968	0.5296	0.536012	0.542218
0.68801	0.693628	0.697436	0.701412	0.705016	0.710157	0.715571
0.034737	0.03471	0.034638	0.034935	0.033743	0.032972	0.033552
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.74914	0.754731	0.758468	0.762741	0.765152	0.769522	0.775516
0.060327	0.061923	0.063505	0.064514	0.066602	0.069233	0.070775
0.119283	0.11911	0.118981	0.118629	0.118881	0.119384	0.119412
0.002121	0.002325	0.002513	0.002643	0.00293	0.003238	0.003456

2040	2041	2042	2043	2044	2045	2046	2047
0.061056	0.061104	0.061148	0.061246	0.061366	0.061527	0.061671	0.061826
0.001118	0.001092	0.001068	0.001044	0.001021	0.001	0.000978	0.000955
0.024422	0.024035	0.023653	0.023291	0.022934	0.022595	0.022249	0.021904
0.086595	0.086232	0.085869	0.085581	0.085321	0.085122	0.084898	0.084685
0.490295	0.491899	0.493499	0.495528	0.49777	0.500534	0.503156	0.505889
0.061678	0.061036	0.060285	0.059577	0.058916	0.058318	0.057758	0.057304
1.431054	1.437304	1.443705	1.451567	1.460449	1.469673	1.47875	1.487574
2.069622	2.076471	2.083359	2.092253	2.102455	2.113647	2.12456	2.135453
2.104214	2.085547	2.082269	2.109034	2.096243	2.126556	2.13473	2.167311
4.173837	4.162018	4.165628	4.201287	4.198698	4.240203	4.25929	4.302764
0.054474	0.055144	0.055757	0.056434	0.057068	0.057708	0.058312	0.058935
0.016698	0.016986	0.017289	0.017583	0.017884	0.018187	0.01848	0.018767
0.002023	0.002081	0.002138	0.002193	0.002248	0.002304	0.002354	0.002399
0.059547	0.059488	0.05948	0.059496	0.059505	0.059494	0.059425	0.059305
0.002787	0.002813	0.002919	0.003034	0.003104	0.003176	0.003207	0.003214
0.135529	0.136512	0.137583	0.13874	0.139809	0.140869	0.141777	0.14262
0.421941	0.425162	0.428615	0.432541	0.437078	0.441979	0.446827	0.451857
0.006063	0.006062	0.006061	0.00606	0.006059	0.006058	0.006058	0.006057
0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821	0.019821
1.254351	1.268291	1.282597	1.297833	1.313625	1.329779	1.346603	1.36359
1.837706	1.855849	1.874677	1.894995	1.916393	1.938506	1.961086	1.983945
1.844391	1.840307	1.849902	1.885667	1.885501	1.924135	1.943963	1.986673
3.682097	3.696155	3.724579	3.780663	3.801894	3.862641	3.905049	3.970618
0.032205	0.03228	0.032304	0.032401	0.032493	0.032567	0.032581	0.032841
0.038888	0.038912	0.038965	0.039062	0.039142	0.039201	0.039272	0.039381
0.177283	0.178144	0.178987	0.180292	0.181643	0.182841	0.184017	0.185107
0.009352	0.009267	0.009437	0.009581	0.009675	0.009784	0.009857	0.009945
0.290131	0.294959	0.299776	0.304978	0.310139	0.31529	0.320652	0.326004
0.547859	0.553562	0.559468	0.566313	0.573092	0.579684	0.586379	0.593279
0.720667	0.724398	0.725541	0.728413	0.731773	0.734961	0.737712	0.742414
0.034444	0.035176	0.036243	0.037696	0.03915	0.041854	0.045194	0.050113
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.781504	0.785967	0.788178	0.792503	0.797316	0.803208	0.809299	0.81892
0.072845	0.074804	0.073897	0.07353	0.073347	0.073513	0.074083	0.073979
0.119713	0.119992	0.119323	0.11902	0.118768	0.118503	0.118358	0.117932
0.003817	0.004155	0.004232	0.004421	0.004598	0.004774	0.005037	0.005184

2048	3 2049	2050	Growth (2016-2050)
0.061976	0.062129	0.062281	-0.10%
0.000933		0.000892	-1.90%
0.02157		0.020936	-1.00%
0.084479	0.084293	0.084109	-0.40%
0.508638	0.511132	0.513413	0.40%
0.056831	0.056282	0.055799	-0.90%
1.495661	1.503773	1.511666	0.60%
2.145609	2.15548	2.164987	0.40%
2.188965	2.187835	2.188673	0.50%
4.334575	4.343314	4.35366	0.50%
0.050533	0.000133	0.00001	1.000/
0.059532		0.060691	1.00%
0.019081		0.019642	1.40%
0.002447		0.002545	1.60%
0.059194		0.059035	-0.40%
0.003251		0.003314	-1.60%
0.143505		0.145227	0.30%
0.457123		0.46697	0.60%
0.006056		0.006052	0.40%
0.019821		0.019821	0.00%
1.381148		1.41821	0.80%
2.007654		2.056281	0.70%
2.021371		2.053363	0.80%
4.029025	4.067707	4.109644	0.80%
0.033059	0.03329	0.033654	1.10%
0.039484	0.039583	0.039748	0.10%
0.186181	0.187316	0.18874	0.90%
0.01002	0.010199	0.010209	0.10%
0.331599		0.34279	1.40%
0.600343	0.00, 200	0.615141	1.10%
0.747355	0.752597	0.759319	1.00%
0.054895	0.059061	0.062564	0.80%
0.026393		0.026393	
0.828642	0.838051	0.848277	1.10%
0.074738		0.075701	1.30%
0.117725	0.117371	0.117396	0.10%
0.005484	0.005736	0.006013	

Coal Subtotal

Biofuels Heat and Coproducts

Renewable Energy

Electricity

Delivered Energy

Electricity Related Losses

Total

Transportation

Propane

Motor Gasoline

of which: E85

Jet Fuel

Distillate Fuel Oil

Residual Fuel Oil

Other Petroleum

Petroleum and Other Liquids Subtotal

Pipeline Fuel Natural Gas

Compressed / Liquefied Natural Gas

Hydrogen

Electricity

Delivered Energy

Electricity Related Losses

Total

Unspecified Sector

Total

Delivered Energy Consumption

Liquefied Petroleum Gases and Other

Motor Gasoline of which: E85

Jet Fuel

Kerosene

Distillate Fuel Oil

Residual Fuel Oil

Petrochemical Feedstocks

Other Petroleum

Petroleum and Other Liquids Subtotal

Natural Gas

Natural-Gas-to-Liquids Heat and Power

Lease and Plant Fuel

Natural Gas Liquefaction for Export

Pipeline Fuel Natural Gas

Natural Gas Subtotal

Metallurgical Coal

Other Coal

Coal-to-Liquids Heat and Power

Net Coal Coke Imports

Coal Subtotal

Energy Use: Industrial: Coal Subtotal: Reference case without Clean Power Plan

Energy Use: Industrial: Biofuels Heat and Coproducts: Reference case without Clean Power Plan

Energy Use: Industrial: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Industrial: Electricity: Reference case without Clean Power Plan

Energy Use: Industrial: Delivered Energy: Reference case without Clean Power Plan

Energy Use: Industrial: Electricity Related Losses: Reference case without Clean Power Plan

Energy Use: Industrial: Total: Reference case without Clean Power Plan

Energy Use: Transportation: Propane: Reference case without Clean Power Plan

Energy Use: Transportation: Motor Gasoline: Reference case without Clean Power Plan

Energy Use: Transportation: E85: Reference case without Clean Power Plan

Energy Use: Transportation: Jet Fuel: Reference case without Clean Power Plan

Energy Use: Transportation: Distillate Fuel Oil: Reference case without Clean Power Plan

Energy Use: Transportation: Residual Fuel Oil: Reference case without Clean Power Plan

Energy Use: Transportation: Other Petroleum: Reference case without Clean Power Plan

Energy Use: Transportation: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Transportation: Pipeline Fuel Natural Gas: Reference case without Clean Power Plan

Energy Use: Transportation: Natural Gas: Reference case without Clean Power Plan

Energy Use: Transportation: Hydrogen: Reference case without Clean Power Plan

Energy Use: Transportation: Electricity: Reference case without Clean Power Plan

Energy Use: Transportation: Delivered Energy: Reference case without Clean Power Plan

Energy Use: Transportation: Electricity Related Losses: Reference case without Clean Power Plan

Energy Use: Transportation: Total: Reference case without Clean Power Plan

Energy Use: Unspecified: Total: Reference case without Clean Power Plan

All Sectors

Energy Use: Delivered: All Sectors: Liquefied Petroleum Gases: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Motor Gasoline: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: E85: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Jet Fuel: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Kerosene: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Distillate Fuel Oil: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Residual Fuel Oil: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Petrochemical Feedstocks: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Other Petroleum: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Natural Gas: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Natural-Gas-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Lease and Plant Fuel: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Liquefaction: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Pipeline Natural Gas: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Natural Gas Subtotal: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Metallurgical Coal: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Other Coal: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Coal-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Net Coal Coke Imports: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Coal Subtotal: Reference case without Clean Power Plan

2-AEO2017.47.ref_no_cpp-d120816a	quads	0.165175	0.163012	0.164496
2-AEO2017.48.ref_no_cpp-d120816a	quads	0.174471	0.184655	0.183556
2-AEO2017.49.ref_no_cpp-d120816a	quads	0.499755	0.488682	0.482937
2-AEO2017.50.ref_no_cpp-d120816a	quads	0.434578	0.430802	0.443146
2-AEO2017.51.ref_no_cpp-d120816a	quads	2.295875	2.285053	2.312263
2-AEO2017.52.ref_no_cpp-d120816a	quads	0.727085	0.636447	0.611824
2-AEO2017.53.ref_no_cpp-d120816a	quads	3.022959	2.921499	2.924087
2-AEO2017.56.				
2-AEO2017.57.ref_no_cpp-d120816a	quads	0.001941	0.002011	0.002295
2-AEO2017.58.ref_no_cpp-d120816a	quads	3.507222	3.558536	3.587766
2-AEO2017.59.ref_no_cpp-d120816a	quads	0.004686	0.007226	0.006217
2-AEO2017.60.ref_no_cpp-d120816a	quads	0.327458	0.327161	0.332665
2-AEO2017.61.ref no cpp-d120816a	quads	1.013063	0.999531	1.027148
2-AEO2017.62.ref_no_cpp-d120816a	quads	0.079003	0.104818	0.077956
2-AEO2017.63.ref_no_cpp-d120816a	quads	0.030134	0.030671	0.030987
2-AEO2017.64.ref_no_cpp-d120816a	quads	4.958821	5.022727	5.058816
2-AEO2017.65.ref_no_cpp-d120816a	quads	0.061565	0.056091	0.04919
2-AEO2017.66.ref_no_cpp-d120816a	quads	0.010643	0.012072	0.013787
2-AEO2017.67.ref_no_cpp-d120816a	quads	0.000057	0.000115	0.000181
2-AEO2017.68.ref no cpp-d120816a	quads	0.005047	0.005945	0.006907
2-AEO2017.69.ref_no_cpp-d120816a	quads	5.036132	5.096951	5.128881
2-AEO2017.70.ref_no_cpp-d120816a	quads	0.008443	0.008783	0.009537
2-AEO2017.71.ref_no_cpp-d120816a	quads	5.044575	5.105734	5.138418
2-AEO2017.73.				
2-AEO2017.77.ref no cpp-d120816a	quads	-0.112563	-0.104673	-0.13238
2-AEO2017.77.ref_no_cpp-d120816a	quads 2-AEO2017.79.	-0.112563	-0.104673	-0.13238
	•	-0.112563 0.121598	-0.104673 0.134036	-0.13238 0.131999
2-AEO2017.80.ref_no_cpp-d120816a	2-AEO2017.79.			
	2-AEO2017.79. quads	0.121598	0.134036	0.131999
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a	2-AEO2017.79. quads quads	0.121598 3.479439	0.134036 3.55194	0.131999 3.558541
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads	0.121598 3.479439 0.004686	0.134036 3.55194 0.007226	0.131999 3.558541 0.006217
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads quads	0.121598 3.479439 0.004686 0.368655	0.134036 3.55194 0.007226 0.379592	0.131999 3.558541 0.006217 0.37406
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads quads quads	0.121598 3.479439 0.004686 0.368655 0.002031	0.134036 3.55194 0.007226 0.379592 0.003178	0.131999 3.558541 0.006217 0.37406 0.003064
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads quads quads quads quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads quads quads quads quads quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a	2-AEO2017.79. quads quads quads quads quads quads quads quads quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.94.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375 0.061565	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527 0.048132 0.056091	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256 0.04919
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.94.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375 0.061565 1.503744	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527 0.048132 0.056091 1.50075	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256 0.04919 1.51639
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.94.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a 2-AEO2017.97.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375 0.061565 1.503744 0.050271	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527 0.048132 0.056091 1.50075 0.048649	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256 0.04919 1.51639 0.050798
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.88.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.91.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a 2-AEO2017.97.ref_no_cpp-d120816a 2-AEO2017.97.ref_no_cpp-d120816a 2-AEO2017.97.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375 0.061565 1.503744 0.050271	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527 0.048132 0.056091 1.50075 0.048649	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256 0.04919 1.51639 0.050798
2-AEO2017.80.ref_no_cpp-d120816a 2-AEO2017.81.ref_no_cpp-d120816a 2-AEO2017.82.ref_no_cpp-d120816a 2-AEO2017.83.ref_no_cpp-d120816a 2-AEO2017.84.ref_no_cpp-d120816a 2-AEO2017.85.ref_no_cpp-d120816a 2-AEO2017.86.ref_no_cpp-d120816a 2-AEO2017.87.ref_no_cpp-d120816a 2-AEO2017.89.ref_no_cpp-d120816a 2-AEO2017.90.ref_no_cpp-d120816a 2-AEO2017.92.ref_no_cpp-d120816a 2-AEO2017.93.ref_no_cpp-d120816a 2-AEO2017.94.ref_no_cpp-d120816a 2-AEO2017.95.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a 2-AEO2017.96.ref_no_cpp-d120816a 2-AEO2017.97.ref_no_cpp-d120816a	2-AEO2017.79. quads	0.121598 3.479439 0.004686 0.368655 0.002031 1.17606 0.086548 0.243672 5.478004 1.376804 0.065375 0.061565 1.503744 0.050271 0.123408	0.134036 3.55194 0.007226 0.379592 0.003178 1.135251 0.120623 0.245521 5.570141 1.396527 0.048132 0.056091 1.50075 0.048649 0.12002	0.131999 3.558541 0.006217 0.37406 0.003064 1.186341 0.089142 0.250491 5.593638 1.423944 0.043256 0.04919 1.51639 0.050798 0.118285

0.165077	0.168704	0.172735	0.179142	0.184139	0.187867	0.189446	0.189582
0.179154	0.179714	0.179441	0.179331	0.17976	0.179706	0.180502	0.18139
0.492371	0.497144	0.502581	0.512872	0.524602	0.536825	0.543113	0.544111
0.458898	0.474324	0.483702	0.495303	0.509827	0.522751	0.530668	0.535046
2.384737	2.452146	2.47676	2.526132	2.580716	2.630725	2.660758	2.674899
0.664944	0.741039	0.797002	0.816449	0.848703	0.862566	0.873701	0.870361
3.049681	3.193184	3.273762	3.342581	3.429419	3.493291	3.534459	3.545259
0.002296	0.002623	0.002752	0.002818	0.002835	0.002785	0.002749	0.002746
3.605849	3.590788	3.558993	3.515263	3.463631	3.399979	3.335041	3.266926
0.004076	0.004602	0.005147	0.005739	0.006291	0.01258	0.012524	0.012422
0.337286	0.341723	0.347124	0.35355	0.360077	0.366382	0.372704	0.378759
1.02709	1.027727	1.014462	1.01984	1.02572	1.028868	1.028559	1.023222
0.077444	0.077032	0.103394	0.107038	0.11127	0.11545	0.120003	0.124106
0.031178	0.03131	0.031334	0.031408	0.031499	0.031599	0.031721	0.031842
5.081143	5.071204	5.058059	5.029917	4.995033	4.945064	4.890778	4.827601
0.048745	0.046854	0.044675	0.044486	0.044092	0.044199	0.043569	0.042667
0.015223	0.01645	0.017795	0.01842	0.018951	0.019477	0.020129	0.020943
0.000365	0.000703	0.001195	0.001827	0.002536	0.003348	0.00422	0.005145
0.007926	0.0095	0.011534	0.014247	0.017352	0.020791	0.02451	0.028413
5.153403	5.144711	5.133259	5.108898	5.077964	5.032878	4.983205	4.924769
0.011485	0.014842	0.019004	0.023484	0.028886	0.034306	0.040353	0.04622
5.164888	5.159554	5.152263	5.132382	5.10685	5.067184	5.023558	4.970989
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0.130646	0.132229	0.13325	0.134457	0.135511	0.136604	0.137781	0.13894
3.576471	3.561651	3.530792	3.488123	3.437872	3.376178	3.313076	3.246752
0.004076	0.004602	0.005147	0.005739	0.006291	0.01258	0.012524	0.012422
0.379488	0.384715	0.390795	0.39803	0.405378	0.412476	0.419593	0.42641
0.002907	0.002834	0.002816	0.002825	0.002828	0.00284	0.002855	0.002863
1.196856	1.207621	1.195346	1.20014	1.207546	1.21275	1.21347	1.20864
0.087287	0.087771	0.115442	0.119665	0.123714	0.128063	0.13277	0.136754
0.254889	0.258334	0.250592	0.251252	0.253767	0.258523	0.261238	0.26273
5.628545	5.635156	5.619034	5.594491	5.566616	5.527433	5.480783	5.423089
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0.015712	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.048745	0.046854	0.044675	0.044486	0.044092	0.044199	0.043569	0.042667
1.559476	1.592836	1.604095	1.626387	1.646362	1.662848	1.674606	1.682118
0.049531	0.049998	0.052145	0.055259	0.057084	0.058425	0.059382	0.059686
0.12078	0.123793	0.125767	0.128985	0.132295	0.13445	0.135019	0.134762
0.000389	0.000683	0.000745	0.00098	0.000843	0.001077	0.001133	0.00122
0.170699	0.174473	0.178658	0.185224	0.190222	0.193952	0.195534	0.195669

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0.543601	0.547639	0.550046	0.550984	0.550031	0.548828	0.547803	
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2.680863	2.685193	2.686063	2.690231	2.693251	2.691496	2.695534	
0.86139	0.845669	0.848738	0.850359	0.831099	0.815404	0.819144	
3.542254	3.530862	3.534801	3.54059	3.52435	3.5069	3.514679	
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3.201373	3.144395	3.097526	3.055579	3.016936	2.981738	2.951344	
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0.384167	0.390433	0.397237	0.403528	0.409071	0.414835	0.420927	
1.012191	1.004383	0.996257	0.988213	0.980841	0.9726	0.963961	
0.127502	0.130852	0.134689	0.138556	0.142221	0.145926	0.149384	
0.03193	0.03202	0.032114	0.032221	0.032299	0.032396	0.032504	
4.759899	4.704797	4.660554	4.620879	4.584203	4.550353	4.521024	
0.040965	0.037488	0.03558	0.034564	0.033027	0.03216	0.031805	
0.02185	0.023004	0.024396	0.025814	0.027269	0.028666	0.030014	
0.005987	0.006779	0.007488	0.008153	0.008798	0.009399	0.009944	
0.032217	0.0358	0.039191	0.042445	0.045643	0.048685	0.051557	
4.860918	4.807868	4.767209	4.731855	4.698941	4.669263	4.644343	
0.051601	0.056055	0.061601	0.066849	0.070318	0.073736	0.078536	
4.912519	4.863923	4.828811	4.798705	4.769259	4.742999	4.72288	
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0.140096	0.140721	0.141492	0.142474	0.143325	0.143811	0.144397	
3.182984	3.12745	3.081953	3.041312	3.0038	2.969594	2.940127	
0.017077	0.020702	0.023478	0.027602	0.031335	0.033132	0.035639	
0.432498	0.439553	0.447213	0.454295	0.460535	0.467024	0.473883	
0.002874	0.002888	0.002915	0.002934	0.002946	0.002954	0.002962	
1.198233	1.190731	1.182753	1.174982	1.167806	1.159583	1.150596	
0.140212	0.143751	0.14779	0.151638	0.155112	0.158674	0.161806	
0.264292	0.266799	0.270671	0.274857	0.278979	0.283555	0.286756	
5.361191	5.311893	5.274787	5.242493	5.212502	5.185195	5.160527	
1.568178	1.572035	1.574984	1.58136	1.588286	1.593624	1.601658	
0.050814	0.044511	0.040603	0.039123	0.036387	0.035323	0.034802	
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	
0.040965	0.037488	0.03558	0.034564	0.033027	0.03216	0.031805	
1.68635	1.680427	1.67756	1.681441	1.684093	1.687499	1.694658	
0.059408	0.05887	0.058248	0.057834	0.05839	0.057597	0.058555	
0.134099	0.133659	0.132069	0.130367	0.128929	0.126764	0.125704	
0.00125	0.001376	0.001456	0.001547	0.001669	0.001768	0.001915	
0.194756	0.193905	0.191774	0.189748	0.188988	0.186129	0.186174	

0.181731	0.183357	0.185	0.185786	0.188413	0.191855	0.193642
0.180132	0.180736	0.181301	0.181594	0.182101	0.182872	0.183588
0.549292	0.551826	0.554709	0.557438	0.562333	0.568239	0.572411
0.538869	0.542	0.544931	0.546887	0.549884	0.554392	0.557508
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0.816617	0.818058	0.824384	0.830044	0.828023	0.832624	0.831863
3.523039	3.543304	3.567368	3.588458	3.605505	3.635516	3.656749
3.323033	3.343304	3.307300	3.300430	3.003303	3.033310	3.030743
0.002931	0.002993	0.003057	0.003133	0.003179	0.003226	0.003278
2.928955	2.91277	2.90035	2.888814	2.882027	2.881315	2.880714
0.03849	0.040447	0.042823	0.043608	0.043447	0.04204	0.040833
0.427563	0.434541	0.441832	0.449203	0.456447	0.464515	0.472251
0.959905	0.958706	0.960247	0.961331	0.964542	0.969671	0.974098
0.153318	0.157237	0.161465	0.164809	0.168177	0.171003	0.174116
0.032611	0.032736	0.032872	0.033018	0.033138	0.033291	0.033402
4.505283	4.498982	4.499823	4.500308	4.507511	4.523021	4.537859
0.031642	0.031577	0.031556	0.031803	0.031207	0.031104	0.031788
0.031406	0.032873	0.0344	0.035945	0.037441	0.038989	0.040759
0.01046	0.010954	0.011414	0.011818	0.012188	0.012538	0.012872
0.05436	0.05712	0.059755	0.062217	0.064554	0.066797	0.068975
4.633151	4.631505	4.636948	4.64209	4.6529	4.672448	4.692253
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4.715529	4.717718	4.727346	4.73652	4.750105	4.772768	4.795171
1.713323	1.717710	4.727540	1.75052	4.730103	1.772700	1.733171
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0.145133	0.146047	0.147045	0.147764	0.148617	0.149404	0.15019
0.145122	0.146047	0.147045	0.147764			
2.918532	2.903071	2.891327	2.880346	2.874046	2.8737	2.873431
0.03849	0.040447	0.042823	0.043608	0.043447	0.04204	0.040833
0.481354	0.48921	0.497418	0.505716	0.513872	0.522955	0.531664
0.002994	0.003013	0.003038	0.003046	0.003074	0.003098	0.003117
1.146298	1.14551	1.147538	1.148662	1.151866	1.15714	1.161533
0.165835	0.1695	0.17377	0.176843	0.180318	0.183156	0.186309
0.290273	0.294672	0.299293	0.303868	0.308488	0.313675	0.318741
5.150409	5.151021	5.159428	5.166245	5.180281	5.203129	5.224985
1.608719	1.619558	1.628294	1.637217	1.644392	1.653423	1.664128
0.034737	0.03471	0.034638	0.034935	0.033743	0.032972	0.033552
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.020333	0.020393	0.020393	0.020393	0.020393	0.020393	0.020393
1.701492	1.712237	1.720881	1.730349	1.735735	1.743892	1.755861
0.060327	0.061923	0.063505	0.064514	0.066602	0.069233	0.070775
0.060327	0.001923	0.065505	0.124704	0.124953	0.069253	0.070773
0.123303	0.125169	0.123036	U.124/U4	0.124333	0.123433	0.1234/0
0.002121	0.002325	0.002513	0.002643	0.00293	0.003238	0.003456
0.187811	0.189436	0.191077	0.191861	0.194485	0.197924	0.199709

0.196374	0.198951	0.197451	0.196971	0.196713	0.19679	0.197478	0.197095
0.18406	0.182927	0.182806	0.182523	0.18242	0.18199	0.181715	0.181403
0.57659	0.58217	0.588036	0.594775	0.600919	0.606593	0.611621	0.615074
0.560133	0.562317	0.564178	0.567139	0.569632	0.571607	0.573525	0.575652
2.846519	2.865893	2.880117	2.900224	2.920093	2.939872	2.960017	2.981423
0.823616	0.815928	0.813719	0.824017	0.817617	0.827091	0.827943	0.838692
3.670135	3.681822	3.693836	3.724241	3.73771	3.766963	3.78796	3.820115
3.070133	3.001022	3.033030	3.724241	3.73771	3.700303	3.70730	3.020113
0.003331	0.003371	0.003405	0.003455	0.003501	0.003557	0.003622	0.003682
2.882559	2.879287	2.88146	2.886365	2.893085	2.901308	2.910934	2.920508
0.038212	0.035735	0.031816	0.029166	0.026563	0.026609	0.029324	0.03215
0.47945	0.486862	0.494403	0.502067	0.509827	0.51782	0.525659	0.533217
0.977265	0.98232	0.988158	0.996445	1.005304	1.013325	1.021503	1.029236
0.176731	0.179526	0.182422	0.185459	0.188657	0.191742	0.194829	0.197814
0.03348	0.033571	0.033659	0.033745	0.03385	0.033979	0.034102	0.034198
4.552816	4.564938	4.583506	4.607536	4.634224	4.661731	4.69065	4.718655
0.03248	0.033245	0.033882	0.034781	0.035714	0.037154	0.038693	0.041097
0.042322	0.044036	0.045778	0.047584	0.049452	0.051331	0.053276	0.05528
0.042322	0.013484	0.01376	0.014028	0.014294	0.014534	0.014767	0.015009
0.013203	0.072961	0.074762	0.076494	0.078149	0.079672	0.08113	0.013663
4.711938	4.728663	4.751688	4.780424	4.811832	4.844422	4.878517	4.912592
0.104568	0.105867	0.107831	0.111141	0.112171	0.115282	0.11712	0.120272
4.816506	4.83453	4.859519	4.891564	4.924003	4.959704	4.995636	5.032864
4.810300	4.63433	4.659519	4.691304	4.324003	4.939704	4.993030	3.032804
-0.076233	-0.075666	-0.075293	-0.075121	-0.07502	-0.074801	-0.074586	-0.074368
0.151066	0.151899	0.152614	0.153535	0.154428	0.155358	0.156186	0.157285
2.875481	2.872539	2.874933	2.880063	2.886959	2.895363	2.9052	2.915021
0.038212	0.035735	0.031816	0.029166	0.026563	0.026609	0.029324	0.03215
0.539769	0.548114	0.556602	0.565231	0.573967	0.582966	0.591791	0.600299
0.003141	0.003173	0.003205	0.003237	0.003269	0.003304	0.003332	0.003354
1.164629	1.169717	1.175566	1.184186	1.193378	1.201641	1.209962	1.217735
0.18887	0.191606	0.194778	0.198074	0.201436	0.204703	0.207892	0.210973
0.323611	0.328531	0.333435	0.338723	0.343988	0.34927	0.354755	0.360203
5.246566	5.265578	5.291133	5.323049	5.357426	5.392605	5.429118	5.464871
1.675225	1.685494	1.693433	1.704067	1.716073	1.728804	1.740971	1.755441
0.034444	0.035176	0.036243	0.037696	0.03915	0.041854	0.045194	0.050113
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.03248	0.033245	0.033882	0.034781	0.035714	0.037154	0.038693	0.041097
1.768542	1.780308	1.789951	1.802937	1.81733	1.834205	1.851251	1.873043
0.072845	0.074804	0.073897	0.07353	0.073347	0.073513	0.074083	0.073979
0.125777	0.126054	0.125383	0.12508	0.124827	0.124561	0.124416	0.123989
0.003817	0.004155	0.004232	0.004421	0.004598	0.004774	0.005037	0.005184
0.202438	0.205013	0.203512	0.203031	0.202772	0.202848	0.203536	0.203152

0.197947	0.1977	0.199111	0.60%
0.180895	0.177786	0.172237	-0.20%
0.618094	0.62186	0.625416	0.70%
0.578236	0.5813	0.58518	0.90%
3.004157	3.023951	3.045361	0.80%
0.846273	0.845732	0.847256	0.80%
3.85043	3.869684	3.892617	0.80%
0.003722	0.00377	0.003871	1.90%
2.932015	2.947685	2.96254	-0.50%
0.034894	0.037483	0.041977	5.30%
0.540705	0.548444	0.5562	1.60%
1.036451	1.04448	1.053263	0.20%
0.200626	0.203921	0.207153	2.00%
0.034291	0.034389	0.034489	0.30%
4.747809	4.782689	4.817517	-0.10%
0.04353	0.045365	0.047061	-0.50%
0.057317	0.059427	0.061734	4.90%
0.015259	0.015522	0.015802	15.60%
0.083923	0.085303	0.086709	8.20%
4.947838	4.988306	5.028823	0.00%
0.122825	0.124107	0.125543	8.10%
5.070663	5.112413	5.154366	0.00%
-0.074165	-0.074086	-0.074003	-1.00%
0.15829	0.159321	0.160497	0.50%
2.926753	2.942549	2.957586	-0.50%
0.034894	0.037483	0.041977	5.30%
0.60873	0.617442	0.626175	1.50%
0.003381	0.003414	0.003437	0.20%
1.225034	1.233204	1.242341	0.30%
0.213896	0.217446	0.220676	1.80%
0.36589	0.371255	0.377279	1.30%
5.501973	5.544631	5.587992	0.00%
1.770433	1.785284	1.801436	0.80%
0.054895	0.059061	0.062564	0.80%
0.026393	0.026393	0.026393	
0.04353	0.045365	0.047061	-0.50%
1.89525	1.916104	1.937454	0.80%
0.074738	0.074592	0.075701	1.30%
0.12378	0.123426	0.123449	0.10%
0.005484	0.005736	0.006013	
0.204003	0.203754	0.205163	0.60%

Biofuels Heat and Coproducts

Renewable Energy

Hydrogen

Electricity

Delivered Energy

Electricity Related Losses

Total

Electric Power

Distillate Fuel Oil

Residual Fuel Oil

Petroleum and Other Liquids Subtotal

Natural Gas

Steam Coal

Nuclear / Uranium

Renewable Energy

Non-biogenic Municipal Waste

Electricity Imports

Total

Total Energy Consumption

Liquefied Petroleum Gases and Other

Motor Gasoline

of which: E85

Jet Fuel

Kerosene

Distillate Fuel Oil

Residual Fuel Oil

Petrochemical Feedstocks

Other Petroleum

Petroleum and Other Liquids Subtotal

Natural Gas

Natural-Gas-to-Liquids Heat and Power

Lease and Plant Fuel

Natural Gas Liquefaction for Export

Pipeline Fuel Natural Gas

Natural Gas Subtotal

Metallurgical Coal

Other Coal

Coal-to-Liquids Heat and Power

Net Coal Coke Imports

Coal Subtotal

Nuclear / Uranium

Biofuels Heat and Coproducts

Renewable Energy

Hydrogen

Non-biogenic Municipal Waste

Electricity Imports

Total

Energy Use: Delivered: All Sectors: Biofuels Heat and Coproducts: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Hydrogen: Reference case without Clean Power Plan Energy Use: Delivered: All Sectors: Electricity: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Delivered Energy: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Electricity Related Losses: Reference case without Clean Power Plan

Energy Use: Delivered: All Sectors: Total: Reference case without Clean Power Plan

Energy Use: Electric Power: Distillate Fuel Oil: Reference case without Clean Power Plan Energy Use: Electric Power: Residual Fuel Oil: Reference case without Clean Power Plan Energy Use: Electric Power: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Electric Power: Natural Gas: Reference case without Clean Power Plan Energy Use: Electric Power: Steam Coal: Reference case without Clean Power Plan Energy Use: Electric Power: Nuclear: Reference case without Clean Power Plan

Energy Use: Electric Power: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Electric Power: Non-biogenic Municipal Waste: Reference case without Clean Power Plan

Energy Use: Electric Power: Electricity Imports: Reference case without Clean Power Plan

Energy Use: Electric Power: Total: Reference case without Clean Power Plan

Energy Use: Total: Liquefied Petroleum Gases: Reference case without Clean Power Plan

Energy Use: Total: Motor Gasoline: Reference case without Clean Power Plan

Energy Use: Total: E85: Reference case without Clean Power Plan Energy Use: Total: Jet Fuel: Reference case without Clean Power Plan Energy Use: Total: Kerosene: Reference case without Clean Power Plan

Energy Use: Total: Distillate Fuel Oil: Reference case without Clean Power Plan Energy Use: Total: Residual Fuel Oil: Reference case without Clean Power Plan

Energy Use: Total: Petrochemical Feedstocks: Reference case without Clean Power Plan

Energy Use: Total: Other Petroleum: Reference case without Clean Power Plan Energy Use: Total: Liquid Fuels Subtotal: Reference case without Clean Power Plan

Energy Use: Total: Natural Gas: Reference case without Clean Power Plan

Energy Use: Total: Natural-Gas-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Total: Lease and Plant Fuel: Reference case without Clean Power Plan

Energy Use: Total: Liquefaction: Reference case without Clean Power Plan

Energy Use: Total: Pipeline Natural Gas: Reference case without Clean Power Plan Energy Use: Total: Natural Gas Subtotal: Reference case without Clean Power Plan

Energy Use: Total: Metallurgical Coal: Reference case without Clean Power Plan

Energy Use: Total: Other Coal: Reference case without Clean Power Plan

Energy Use: Total: Coal-to-Liquids Heat and Power: Reference case without Clean Power Plan

Energy Use: Total: Net Coal Coke Imports: Reference case without Clean Power Plan

Energy Use: Total: Coal Subtotal: Reference case without Clean Power Plan

Energy Use: Total: Nuclear: Reference case without Clean Power Plan

Energy Use: Total: Biofuels Heat and Coproducts: Reference case without Clean Power Plan

Energy Use: Total: Renewable Energy: Reference case without Clean Power Plan

Energy Use: Total: Hydrogen: Reference case without Clean Power Plan

Energy Use: Total: Non-biogenic Municipal Waste: Reference case without Clean Power Plan

Energy Use: Total: Electricity Imports: Reference case without Clean Power Plan

Energy Use: Total: Total: Reference case without Clean Power Plan

2-AEO2017.101.ref_no_cpp-d120816a quads 0.0174471 0.184655 0.576674 2-AEO2017.102.ref_no_cpp-d120816a quads 0.001069 0.584026 0.576674 2-AEO2017.103.ref_no_cpp-d120816a quads 0.000057 0.000115 0.000181 2-AEO2017.104.ref_no_cpp-d120816a quads 10.642902 10.74855 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976 1.073976					
2-AEO2017.103.ref_no_cpp-d120816a quads	2-AEO2017.101.ref_no_cpp-d120816a	quads	0.174471	0.184655	0.183556
2-AEC02017.104.ref_no_cpp-d120816a	2-AEO2017.102.ref_no_cpp-d120816a	quads	0.601069	0.584026	0.576674
2-AEC02017.105.ref_no_cpp-d120816a	2-AEO2017.103.ref_no_cpp-d120816a	quads	0.000057	0.000115	0.000181
2-AEO2017.106.ref_no_cpp-d120816a quads	2-AEO2017.104.ref_no_cpp-d120816a	quads	2.715674	2.740545	2.699364
2-AEC02017.110.ref_no_cpp-d120816a quads	2-AEO2017.105.ref_no_cpp-d120816a	quads	10.642902	10.74855	10.739765
2-AEO2017.111.ref_no_cpp-d120816a quads 0.02015 0.025095 0.022778 2-AEO2017.111.ref_no_cpp-d120816a quads 0.02785 0.006466 0.006466 2-AEO2017.113.ref_no_cpp-d120816a quads 0.02785 0.006466 0.006466 2-AEO2017.113.ref_no_cpp-d120816a quads 0.048 0.03156 0.029244 2-AEO2017.113.ref_no_cpp-d120816a quads 2.3301 2.281554 2.22261 2-AEO2017.115.ref_no_cpp-d120816a quads 2.4828 2.072407 1.735583 2-AEO2017.115.ref_no_cpp-d120816a quads 0.254697 0.269259 0.310512 2-AEO2017.119.ref_no_cpp-d120816a quads 0.254697 0.269259 0.310512 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.1120.ref_no_cpp-d120816a quads 0.121598 0.134036 0.131999 2-AEO2017.122.ref_no_cpp-d120816a quads 0.121598 0.134036 0.131999 2-AEO2017.125.ref_no_cpp-d120816a quads 0.06739 0.355144 3.558541 0.4602017.125.ref_no_cpp-d120816a quads 0.06686 0.007226 0.006217 2-AEO2017.125.ref_no_cpp-d120816a quads 0.06865 0.07726 0.006217 2-AEO2017.127.ref_no_cpp-d120816a quads 0.002031 0.003178 0.003064 0.062017.129.ref_no_cpp-d120816a quads 0.002031 0.003178 0.003064 0.062017.129.ref_no_cpp-d120816a quads 0.114398 0.127089 0.095608 0.060217.129.ref_no_cpp-d120816a quads 0.144398 0.127089 0.095608 0.060217.129.ref_no_cpp-d120816a quads 0.243672 0.245521 0.250491 0.003178 0.003064 0.	2-AEO2017.106.ref_no_cpp-d120816a	quads	4.543543	4.048749	3.726839
2-AEO2017.111.ref_no_cpp-d120816a quads 0.02015 0.025095 0.022778 2-AEO2017.112.ref_no_cpp-d120816a quads 0.02785 0.006466 0.006466 2-AEO2017.113.ref_no_cpp-d120816a quads 0.048 0.03156 0.029244 2-AEO2017.113.ref_no_cpp-d120816a quads 2.3301 2.281554 2.22261 2-AEO2017.115.ref_no_cpp-d120816a quads 2.4828 2.072407 1.735583 2-AEO2017.115.ref_no_cpp-d120816a quads 0.254697 0.269259 0.310512 2-AEO2017.115.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.1120.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.120.ref_no_cpp-d120816a quads 0.121598 0.134036 0.131999 2-AEO2017.122. 2-AEO2017.122. 2-AEO2017.123.ref_no_cpp-d120816a quads 0.04686 0.007226 0.006217 2-AEO2017.124.ref_no_cpp-d120816a quads 0.04686 0.007226 0.006217 2-AEO2017.125.ref_no_cpp-d120816a quads 0.14962 0.00638 0.12092 0.007226 0.006217 2-AEO2017.125.ref_no_cpp-d120816a quads 0.02031 0.003178 0.003064 2-AEO2017.135.ref_no_cpp-d120816a quads 0.14938 0.127089 0.095608 0.006017.135.ref_no_cpp-d120816a quads 0.04686 0.007226 0.006217 0.006207 0.0062	2-AEO2017.107.ref_no_cpp-d120816a	quads	15.186445	14.797299	14.466604
2-AEO2017.112.ref_no_cpp-d120816a quads 0.048 0.03156 0.029244 2-AEO2017.113.ref_no_cpp-d120816a quads 0.048 0.03156 0.029244 2-AEO2017.114.ref_no_cpp-d120816a quads 2.3301 2.281554 2.22261 2-AEO2017.115.ref_no_cpp-d120816a quads 2.4828 2.072407 1.735583 2-AEO2017.115.ref_no_cpp-d120816a quads 0.254697 0.269259 0.310512 2-AEO2017.115.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 2-AEO2017.119.ref_no_cpp-d120816a quads 0.06733 0.06733 2-AEO2017.120.ref_no_cpp-d120816a quads 0.0254697 0.269259 0.310512 2-AEO2017.123.ref_no_cpp-d120816a quads 0.020017.122. 2-AEO2017.123.ref_no_cpp-d120816a quads 0.121598 0.134036 0.131999 2-AEO2017.125.ref_no_cpp-d120816a quads 0.04686 0.007226 0.006217 2-AEO2017.125.ref_no_cpp-d120816a quads 0.04686 0.007226 0.006217 2-AEO2017.126.ref_no_cpp-d120816a quads 0.0468655 0.379592 0.37406 2-AEO2017.127.ref_no_cpp-d120816a quads 0.002031 0.03178 0.003064 2-AEO2017.129.ref_no_cpp-d120816a quads 0.114398 0.127089 0.095608 2-AEO2017.130.ref_no_cpp-d120816a quads 0.14398 0.127089 0.095608 2-AEO2017.131.ref_no_cpp-d120816a quads 0.14398 0.127089 0.095608 2-AEO2017.131.ref_no_cpp-d120816a quads 0.243672 0.245521 0.250491 2-AEO2017.133.ref_no_cpp-d120816a quads 0.065375 0.048132 0.043256 2-AEO2017.134.ref_no_cpp-d120816a quads 0.065375 0.048132 0.043256 2-AEO2017.135.ref_no_cpp-d120816a quads 0.065375 0.048132 0.043256 2-AEO2017.137.ref_no_cpp-d120816a quads 0.065375 0.048132 0.049326 2-AEO2017.137.ref_no_cpp-d120816a quads 0.065375 0.048132 0.049326 2-AEO2017.139.ref_no_cpp-d120816a quads 0.065375 0.048132 0.049326 2-AEO2017.139.ref_no_cpp-d120816a quads 0.065375 0.048132 0.049326 2-AEO2017.139.ref_no_cpp-d120816a quads 0.065375 0.048132 0.049326 2-AEO2017.141.ref_no_cpp-d120816a quads 0.065375 0.048649 0.050798 2-AEO2017.142.ref_no_cpp-d120816a quads 0.065375 0.048649 0.050798 2-AEO2017.142.ref_no_cpp-d1208	2-AEO2017.110.				
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2-AEO2017.132.ref_no_cpp-d120816a quads 3.706905 3.678081 3.646554 2-AEO2017.133.ref_no_cpp-d120816a quads 2-AEO2017.134.ref_no_cpp-d120816a quads 0.065375 0.048132 0.043256 2-AEO2017.135.ref_no_cpp-d120816a quads 0.065375 0.048132 0.043256 2-AEO2017.136.ref_no_cpp-d120816a quads 0.061565 0.056091 0.04919 2-AEO2017.138.ref_no_cpp-d120816a quads 0.050271 0.048649 0.050798 2-AEO2017.139.ref_no_cpp-d120816a quads 0.050271 0.048649 0.050798 2-AEO2017.140.ref_no_cpp-d120816a quads 0.050271 0.048649 0.050798 2-AEO2017.141.ref_no_cpp-d120816a quads 0.050271 0.003795 0.000379 2-AEO2017.142.ref_no_cpp-d120816a quads 0.050271 0.003795 0.000379 2-AEO2017.143.ref_no_cpp-d120816a quads 0.050279 0.000351 0.000879 2-AEO2017.144.ref_no_cpp-d120816a quads 0.050289 0.067184 0.050250 0		•	0.242672	0.245521	0.350401
2-AEO2017.133.ref_no_cpp-d120816a quads 2-AEO2017.134.ref_no_cpp-d120816a quads 2-AEO2017.135.ref_no_cpp-d120816a quads 2-AEO2017.136.ref_no_cpp-d120816a quads 2-AEO2017.136.ref_no_cpp-d120816a quads 2-AEO2017.137.ref_no_cpp-d120816a quads 2-AEO2017.138.ref_no_cpp-d120816a quads 2-AEO2017.139.ref_no_cpp-d120816a quads 2-AEO2017.140.ref_no_cpp-d120816a quads 2-AEO2017.140.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads		•			
2-AEO2017.134.ref_no_cpp-d120816a quads 2-AEO2017.135.ref_no_cpp-d120816a quads 2-AEO2017.136.ref_no_cpp-d120816a quads 2-AEO2017.137.ref_no_cpp-d120816a quads 2-AEO2017.138.ref_no_cpp-d120816a quads 2-AEO2017.138.ref_no_cpp-d120816a quads 2-AEO2017.139.ref_no_cpp-d120816a quads 2-AEO2017.140.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads		•			
2-AEO2017.135.ref_no_cpp-d120816a quads 2-AEO2017.136.ref_no_cpp-d120816a quads 2-AEO2017.137.ref_no_cpp-d120816a quads 2-AEO2017.137.ref_no_cpp-d120816a quads 2-AEO2017.138.ref_no_cpp-d120816a quads 3.833844 3.782304 3.739 2-AEO2017.139.ref_no_cpp-d120816a quads 2-AEO2017.140.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads		•	3./06905	3.678081	3.646554
2-AEO2017.136.ref_no_cpp-d120816a quads 2-AEO2017.137.ref_no_cpp-d120816a quads 2-AEO2017.138.ref_no_cpp-d120816a quads 3.833844 3.782304 3.739 2-AEO2017.139.ref_no_cpp-d120816a quads 2.AEO2017.140.ref_no_cpp-d120816a quads 2.AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2.AEO2017.144.ref_no_cpp-d120816a quads 2.AEO2017.145.ref_no_cpp-d120816a quads 2.AEO2017.145.ref_no_cpp-d120816a quads 2.AEO2017.145.ref_no_cpp-d120816a quads 2.AEO2017.146.ref_no_cpp-d120816a quads 2.AEO2017.146.ref_no_cpp-d120816a quads 2.AEO2017.147.ref_no_cpp-d120816a quads 2.AEO2017.148.ref_no_cpp-d120816a quads 2.AEO2017.148.ref_no_cpp-d120816a quads 2.AEO2017.148.ref_no_cpp-d120816a quads 2.AEO2017.149.ref_no_cpp-d120816a quads 3.833844 3.782304 3.7		•	0.055075	0.040400	0.040056
2-AEO2017.137.ref_no_cpp-d120816a quads		•	0.065375	0.048132	0.043256
2-AEO2017.138.ref_no_cpp-d120816a quads		•			
2-AEO2017.139.ref_no_cpp-d120816a quads		•			
2-AEO2017.140.ref_no_cpp-d120816a quads 2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads		•			
2-AEO2017.141.ref_no_cpp-d120816a quads 2-AEO2017.142.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.143.ref_no_cpp-d120816a quads 2-AEO2017.144.ref_no_cpp-d120816a quads 2.076289 2.067184 2.060925 2-AEO2017.145.ref_no_cpp-d120816a quads 2-AEO2017.146.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.147.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.148.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads 2-AEO2017.149.ref_no_cpp-d120816a quads					
2-AEO2017.142.ref_no_cpp-d120816aquads-0.003795-0.0003510.0008792-AEO2017.143.ref_no_cpp-d120816aquads2.6526842.2407261.9055452-AEO2017.144.ref_no_cpp-d120816aquads2.0762892.0671842.0609252-AEO2017.145.ref_no_cpp-d120816aquads0.1744710.1846550.1835562-AEO2017.146.ref_no_cpp-d120816aquads0.8557660.8532850.8871862-AEO2017.147.ref_no_cpp-d120816aquads0.0000570.0001150.0001812-AEO2017.148.ref_no_cpp-d120816aquads0.067330.067330.067332-AEO2017.149.ref_no_cpp-d120816aquads		-	2.606208	2.192427	1.853868
2-AEO2017.143.ref_no_cpp-d120816aquads2.6526842.2407261.9055452-AEO2017.144.ref_no_cpp-d120816aquads2.0762892.0671842.0609252-AEO2017.145.ref_no_cpp-d120816aquads0.1744710.1846550.1835562-AEO2017.146.ref_no_cpp-d120816aquads0.8557660.8532850.8871862-AEO2017.147.ref_no_cpp-d120816aquads0.0000570.0001150.0001812-AEO2017.148.ref_no_cpp-d120816aquads0.067330.067330.067332-AEO2017.149.ref_no_cpp-d120816aquads	2-AEO2017.141.ref_no_cpp-d120816a	•			
2-AEO2017.144.ref_no_cpp-d120816aquads2.0762892.0671842.0609252-AEO2017.145.ref_no_cpp-d120816aquads0.1744710.1846550.1835562-AEO2017.146.ref_no_cpp-d120816aquads0.8557660.8532850.8871862-AEO2017.147.ref_no_cpp-d120816aquads0.0000570.0001150.0001812-AEO2017.148.ref_no_cpp-d120816aquads0.067330.067330.067332-AEO2017.149.ref_no_cpp-d120816aquads	2-AEO2017.142.ref_no_cpp-d120816a	quads	-0.003795	-0.000351	0.000879
2-AEO2017.145.ref_no_cpp-d120816a quads 0.174471 0.184655 0.183556 2-AEO2017.146.ref_no_cpp-d120816a quads 0.855766 0.853285 0.887186 2-AEO2017.147.ref_no_cpp-d120816a quads 0.000057 0.000115 0.000181 2-AEO2017.148.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.149.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733	2-AEO2017.143.ref_no_cpp-d120816a	quads	2.652684	2.240726	1.905545
2-AEO2017.146.ref_no_cpp-d120816a quads 0.855766 0.853285 0.887186 2-AEO2017.147.ref_no_cpp-d120816a quads 0.000057 0.000115 0.000181 2-AEO2017.148.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.149.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733	2-AEO2017.144.ref_no_cpp-d120816a	quads	2.076289	2.067184	2.060925
2-AEO2017.147.ref_no_cpp-d120816a quads 0.000057 0.000115 0.000181 2-AEO2017.148.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.149.ref_no_cpp-d120816a quads quads 0.06733 0.06733	2-AEO2017.145.ref_no_cpp-d120816a	quads	0.174471	0.184655	0.183556
2-AEO2017.148.ref_no_cpp-d120816a quads 0.06733 0.06733 0.06733 2-AEO2017.149.ref_no_cpp-d120816a quads	2-AEO2017.146.ref_no_cpp-d120816a	quads	0.855766	0.853285	0.887186
2-AEO2017.149.ref_no_cpp-d120816a quads	2-AEO2017.147.ref_no_cpp-d120816a	quads	0.000057	0.000115	0.000181
	2-AEO2017.148.ref_no_cpp-d120816a	quads	0.06733	0.06733	0.06733
	2-AEO2017.149.ref_no_cpp-d120816a	quads			
	2-AEO2017.150.ref_no_cpp-d120816a		15.186446	14.7973	14.466606

0.179154	0.179714	0.179441	0.179331	0.17976	0.179706	0.180502	0.18139
0.587439	0.594412	0.600388	0.610441	0.621558	0.632981	0.638387	0.638564
0.000365	0.000703	0.001195	0.001827	0.002536	0.003348	0.00422	0.005145
2.7263	2.738748	2.748209	2.771096	2.806528	2.844867	2.880435	2.912474
10.851978	10.916043	10.931021	10.968797	11.013582	11.045136	11.054467	11.038449
3.950411	4.278757	4.528258	4.567831	4.671993	4.694183	4.742396	4.737727
14.802389	15.1948	15.459279	15.536628	15.685575	15.73932	15.796864	15.776176
0.023433	0.024771	0.025657	0.025275	0.025891	0.026009	0.026458	0.026329
0.006466	0.006466	0.006466	0.00645	0.00645	0.005871	0.005871	0.002878
0.029899	0.031237	0.032123	0.031725	0.03234	0.03188	0.032328	0.029207
2.240288	2.202164	2.092275	2.121348	2.107095	2.148785	2.132809	2.136626
1.956848	2.256268	2.471336	2.405766	2.530544	2.556816	2.652212	2.67882
2.050932	2.117707	2.267421	2.367982	2.388734	2.388734	2.388734	2.388734
0.331414	0.342799	0.345982	0.344775	0.352477	0.345506	0.349418	0.349484
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733
6.676711	7.017506	7.276467	7.338927	7.47852	7.539051	7.622831	7.650201
0.130646	0.132229	0.13325	0.134457	0.135511	0.136604	0.137781	0.13894
3.576471	3.561651	3.530792	3.488123	3.437872	3.376178	3.313076	3.246752
0.004076	0.004602	0.005147	0.005739	0.006291	0.01258	0.012524	0.012422
0.379488	0.384715	0.390795	0.39803	0.405378	0.412476	0.419593	0.42641
0.002907	0.002834	0.002816	0.002825	0.002828	0.00284	0.002855	0.002863
1.22029	1.232392	1.221004	1.225415	1.233437	1.238759	1.239928	1.234969
0.093753	0.094237	0.121908	0.126114	0.130164	0.133934	0.13864	0.139632
0.054000	0.050004	0.050500	0.054050	0.050555	0.050500	0.054000	0.0000
0.254889	0.258334	0.250592	0.251252	0.253767	0.258523	0.261238	0.26273
5.658444	5.666393	5.651157	5.626216	5.598957	5.559314	5.513111	5.452296
3.691112	3.675414	3.577255	3.625621	3.630558	3.687175	3.683275	3.696334
0.044105	0.04624	0.049049	0.051334	0.052414	0.053866	0.054177	0.05335
0.044195 0.015712	0.04634 0.026393	0.048048 0.026393	0.051234 0.026393	0.052414 0.026393	0.053866 0.026393	0.054177	0.05335 0.026393
0.013712			0.026393			0.026393 0.043569	0.026393
3.799764	0.046854 3.795001	0.044675 3.696371	3.747735	0.044092 3.753457	0.044199 3.811633	3.807415	3.818745
0.049531	0.049998	0.052145	0.055259	0.057084	0.058425	0.059382	0.059686
2.077627	2.380061	2.597104	2.534751	2.662839	2.691266	2.787231	2.813582
2.077627	2.360001	2.39/104	2.334/31	2.002639	2.091200	2.767231	2.015562
0.000389	0.000683	0.000745	0.00098	0.000843	0.001077	0.001133	0.00122
2.127547	2.430741	2.649994	2.59099	2.720766	2.750768	2.847746	2.874489
2.050932	2.117707	2.267421	2.367982	2.388734	2.388734	2.388734	2.388734
0.179154	0.179714	0.179441	0.179331	0.17976	0.179706	0.180502	0.18139
0.918854	0.937211	0.94637	0.955216	0.974035	0.978488	0.987805	0.988048
0.000365	0.000703	0.001195	0.001827	0.002536	0.003348	0.00422	0.005145
0.06733	0.06733	0.06733	0.06733	0.002330	0.06733	0.06733	0.06733
0.00733	3.00733	5.00755	0.00/33	3.00733	3.55733	5.55755	5.55755
14.802391	15.1948	15.45928	15.536628	15.685575	15.739321	15.796864	15.776176

0.180439	0.180168	0.180715	0.180907	0.181536	0.179761	0.17959	
0.637192	0.640222	0.641377	0.641178	0.639179	0.637117	0.635327	
0.005987	0.006779	0.007488	0.008153	0.008798	0.009399	0.009944	
2.941183	2.970651	2.997925	3.024805	3.04464	3.065426	3.087528	
11.007098	10.984044	10.971626	10.968724	10.959737	10.950525	10.953749	
4.710839	4.651451	4.712198	4.763917	4.690578	4.642763	4.703247	
15.717937	15.635495	15.683825	15.732641	15.650314	15.593288	15.656996	
0.022426	0.01958	0.016724	0.016379	0.015035	0.014927	0.014922	
0.00091	0.001055	0.000016	0.000084	0.000016	0.000016	0.000061	
0.023335	0.020635	0.01674	0.016463	0.015051	0.014943	0.014983	
2.132078	2.055618	2.094663	2.11192	2.10733	2.123054	2.202348	
2.690996	2.73458	2.762765	2.814332	2.758144	2.722926	2.704708	
2.388734	2.388734	2.396074	2.403395	2.410726	2.393923	2.393923	
0.349548	0.355206	0.37255	0.375282	0.376638	0.386014	0.407484	
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	
7.652022	7.622102	7.710123	7.788722	7.735218	7.708189	7.790775	
0.140096	0.140721	0.141492	0.142474	0.143325	0.143811	0.144397	
3.182984	3.12745	3.081953	3.041312	3.0038	2.969594	2.940127	
0.017077	0.020702	0.023478	0.027602	0.031335	0.033132	0.035639	
0.432498	0.439553	0.447213	0.454295	0.460535	0.467024	0.473883	
0.002874	0.002888	0.002915	0.002934	0.002946	0.002954	0.002962	
1.220659	1.210311	1.199477	1.191361	1.182841	1.17451	1.165518	
0.141122	0.144806	0.147806	0.151722	0.155128	0.158689	0.161867	
0.264292	0.266799	0.270671	0.274857	0.278979	0.283555	0.286756	
5.384526	5.332528	5.291528	5.258955	5.227552	5.200138	5.175509	
3.700256	3.627652	3.669647	3.69328	3.695616	3.716677	3.804007	
0.050814	0.044511	0.040603	0.039123	0.036387	0.035323	0.034802	
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	
0.040965	0.037488	0.03558	0.034564	0.033027	0.03216	0.031805	
3.818429	3.736045	3.772223	3.79336	3.791423	3.810553	3.897007	
0.059408	0.05887	0.058248	0.057834	0.05839	0.057597	0.058555	
2.825094	2.868239	2.894835	2.944699	2.887073	2.84969	2.830412	
0.00125	0.001376	0.001456	0.001547	0.001669	0.001768	0.001915	
2.885752	2.928485	2.954539	3.00408	2.947132	2.909055	2.890882	
2.388734	2.388734	2.396074	2.403395	2.410726	2.393923	2.393923	
0.180439	0.180168	0.180715	0.180907	0.181536	0.179761	0.17959	
0.986739	0.995428	1.013927	1.016461	1.015817	1.02313	1.042811	
0.005987	0.006779	0.007488	0.008153	0.008798	0.009399	0.009944	
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	
15.717937	15.635497	15.683825	15.73264	15.650313	15.59329	15.656995	

0.180132	0.180736	0.181301	0.181594	0.182101	0.182872	0.183588
0.635748	0.637359	0.639321	0.641459	0.645692	0.650856	0.654432
0.01046	0.010954	0.011414	0.011818	0.012188	0.012538	0.012872
3.111835	3.139953	3.169113	3.198016	3.227735	3.260497	3.292624
10.977886	11.021696	11.072535	11.121342	11.178217	11.251709	11.32407
4.715759	4.739236	4.794309	4.853826	4.860365	4.89684	4.912954
15.693645	15.760932	15.866843	15.975167	16.038582	16.148548	16.237024
0.014493	0.014512	0.014607	0.014484	0.014681	0.014071	0.01409
0.000228	0.000326	0.000589	0.001072	0.001439	0.001159	0.000071
0.014721	0.014838	0.015195	0.015557	0.01612	0.01523	0.014161
2.251504	2.29639	2.353604	2.421598	2.401561	2.414347	2.477097
2.679957	2.686908	2.703611	2.688808	2.741144	2.797813	2.791973
2.36235	2.285257	2.222108	2.222108	2.19312	2.190861	2.171592
0.451733	0.528467	0.601575	0.636442	0.668825	0.671755	0.683425
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733
7.827594	7.879189	7.963422	8.051842	8.088099	8.157337	8.205578
0.145133	0.146047	0.147045	0.147764	0.149617	0.140404	0.15010
0.145122	0.146047	0.147045	0.147764	0.148617	0.149404	0.15019
2.918532	2.903071	2.891327	2.880346	2.874046	2.8737	2.873431
0.03849	0.040447	0.042823	0.043608	0.043447	0.04204	0.040833
0.481354	0.48921	0.497418	0.505716	0.513872	0.522955	0.531664
0.002994	0.003013	0.003038	0.003046	0.003074	0.003098	0.003117
1.160791	1.160022	1.162144	1.163146	1.166547	1.171211	1.175622
0.166063	0.169826	0.174359	0.177915	0.181757	0.184315	0.18638
0.290273	0.294672	0.299293	0.303868	0.308488	0.313675	0.318741
5.165129	5.165859	5.174623	5.181802	5.196401	5.218358	5.239146
3.860224	3.915948	3.981897	4.058815	4.045953	4.06777	4.141224
3.000224	3.313346	3.901097	4.036613	4.045355	4.00777	4.141224
0.034737	0.03471	0.034638	0.034935	0.033743	0.032972	0.033552
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.031642	0.031577	0.031556	0.031803	0.031207	0.031104	0.031788
3.952996	4.008627	4.074484	4.151946	4.137296	4.15824	4.232957
0.060327	0.061923	0.063505	0.064514	0.066602	0.069233	0.070775
2.805321	2.812097	2.828669	2.813512	2.866097	2.923267	2.917451
0.002121	0.002325	0.002513	0.002643	0.00293	0.003238	0.003456
2.867768	2.876344	2.894688	2.880668	2.935629	2.995737	2.991682
2.36235	2.285257	2.222108	2.222108	2.19312	2.190861	2.171592
0.180132	0.180736	0.181301	0.181594	0.182101	0.182872	0.183588
1.087481	1.165825	1.240895	1.277901	1.314517	1.322612	1.337857
0.01046	0.010954	0.011414	0.011818	0.012188	0.012538	0.012872
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733
15.693645	15.760933	15.866843	15.975167	16.038582	16.148548	16.237022

0.18406	0.182927	0.182806	0.182523	0.18242	0.18199	0.181715	0.181403
0.658089	0.663027	0.668143	0.674173	0.679656	0.684733	0.6892	0.692199
0.013205	0.013484	0.01376	0.014028	0.014294	0.014534	0.014767	0.015009
3.316653	3.340873	3.365243	3.393033	3.421855	3.450732	3.480008	3.509367
11.389553	11.45121	11.514547	11.592774	11.675752	11.761646	11.849594	11.939045
4.876789	4.847649	4.853722	4.929859	4.911531	4.993064	5.023756	5.112948
16.266342	16.298859	16.368269	16.522633	16.587284	16.754711	16.87335	17.051992
0.013604	0.013517	0.013608	0.013731	0.013812	0.013989	0.014036	0.013992
0.000016	0.000016						
0.01362	0.013532	0.013608	0.013731	0.013812	0.013989	0.014036	0.013992
2.492607	2.524132	2.531496	2.569631	2.615656	2.680894	2.701485	2.795003
2.758481	2.722144	2.731892	2.760558	2.788033	2.844183	2.844659	2.842577
2.182793	2.162548	2.133874	2.113598	2.039948	2.033103	2.033103	2.012797
0.678612	0.698835	0.740764	0.798045	0.808607	0.804297	0.843149	0.890616
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733
8.193442	8.188521	8.218965	8.322892	8.333386	8.443795	8.503763	8.622314
0.151066	0.151899	0.152614	0.153535	0.154428	0.155358	0.156186	0.157285
2.875481	2.872539	2.874933	2.880063	2.886959	2.895363	2.9052	2.915021
0.038212	0.035735	0.031816	0.029166	0.026563	0.026609	0.029324	0.03215
0.539769	0.548114	0.556602	0.565231	0.573967	0.582966	0.591791	0.600299
0.003141	0.003173	0.003205	0.003237	0.003269	0.003304	0.003332	0.003354
1.178233	1.183233	1.189174	1.197917	1.20719	1.21563	1.223998	1.231727
0.188886	0.191621	0.194778	0.198074	0.201436	0.204703	0.207892	0.210973
0.323611	0.328531	0.333435	0.338723	0.343988	0.34927	0.354755	0.360203
5.260186	5.279111	5.304741	5.336779	5.371238	5.406594	5.443153	5.478863
4.167832	4.209627	4.224929	4.273698	4.331729	4.409698	4.442456	4.550444
0.034444	0.035176	0.036243	0.037696	0.03915	0.041854	0.045194	0.050113
0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393	0.026393
0.03248	0.033245	0.033882	0.034781	0.035714	0.037154	0.038693	0.041097
4.261148	4.304441	4.321447	4.372569	4.432986	4.515099	4.552737	4.668046
0.072845	0.074804	0.073897	0.07353	0.073347	0.073513	0.074083	0.073979
2.884257	2.848198	2.857275	2.885638	2.91286	2.968744	2.969075	2.966566
0.003817	0.004155	0.004232	0.004421	0.004598	0.004774	0.005037	0.005184
2.960918	2.927158	2.935403	2.963588	2.990804	3.047031	3.048195	3.04573
2.182793	2.162548	2.133874	2.113598	2.039948	2.033103	2.033103	2.012797
0.18406	0.182927	0.182806	0.182523	0.18242	0.18199	0.181715	0.181403
1.336701	1.361862	1.408907	1.472218	1.488262	1.48903	1.532349	1.582815
0.013205	0.013484	0.01376	0.014028	0.014294	0.014534	0.014767	0.015009
0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733	0.06733
16.266342	16.298859	16.368269	16.522633	16.587282	16.754709	16.873348	17.051994

0.180895	0.177786	0.172237	-0.20%
0.694746	0.697964	0.701036	0.50%
0.015259	0.015522	0.015802	15.60%
3.538968	3.56971	3.601765	0.80%
12.031096	12.125471	12.221449	0.40%
5.179434	5.193562	5.214835	0.70%
17.210529	17.319033	17.436283	0.50%
0.013925	0.013958	0.014017	-1.70%
			-48.50%
0.013925	0.013958	0.014017	-2.40%
2.907383	2.950279	3.016209	0.80%
2.830658	2.826012	2.832058	0.90%
2.000889	2.000889	1.985578	-0.10%
0.898217	0.904804	0.90141	3.60%
0.06733	0.06733	0.06733	0.00%
8.718402	8.763272	8.816601	0.80%
0.15829	0.159321	0.160497	0.50%
2.926753	2.942549	2.957586	-0.50%
0.034894	0.037483	0.041977	5.30%
0.60873	0.617442	0.626175	1.50%
0.003381	0.003414	0.003437	0.20%
1.238959	1.247163	1.256358	0.20%
0.213896	0.217446	0.220676	1.60%
0.36589	0.371255	0.377279	1.30%
5.515898	5.558589	5.602008	0.00%
4.677816	4.735562	4.817645	0.80%
0.054895	0.059061	0.062564	0.80%
0.026393	0.026393	0.026393	
0.04353	0.045365	0.047061	-0.50%
4.802633	4.866382	4.953663	0.80%
0.074738	0.074592	0.075701	1.30%
2.954439	2.949438	2.955507	0.90%
0.005484	0.005736	0.006013	
3.034661	3.029766	3.037221	0.90%
2.000889	2.000889	1.985578	-0.10%
0.180895	0.177786	0.172237	-0.20%
1.592963	1.602767	1.602446	1.90%
0.015259	0.015522	0.015802	15.60%
0.06733	0.06733	0.06733	0.00%
17.210527	17.319031	17.436285	0.50%

Energy Use & Related Statistics
Delivered Energy Use
Total Energy Use
Ethanol Consumed in Motor Gasoline and E85
Population (millions)
Gross Domestic Product (billion 2009 dollars)
Carbon Dioxide Emissions (million metric tons carbon dioxide)

Energy Use & Related Statistics: Delivered Energy Use: Reference case without Clean Power Plan
Energy Use & Related Statistics: Total Energy Use: Reference case without Clean Power Plan
Energy Use & Related Statistics: Ethanol Consumed in Motor Gasoline and E85: Reference case without Clean Power Plan
Energy Use & Related Statistics: Population: Reference case without Clean Power Plan
Energy Use & Related Statistics: Gross Domestic Product: Reference case without Clean Power Plan

Energy Use & Related Statistics: Carbon Dioxide Emissions: Reference case without Clean Power Plan

2-AEO2	017.	152.

2-AEO2017.153.ref_no_cpp-d120816a	quads	10.642902	10.74855	10.739765
2-AEO2017.154.ref_no_cpp-d120816a	quads	15.186446	14.7973	14.466606
2-AEO2017.155.ref_no_cpp-d120816a	quads	0.254131	0.255683	0.25824
2-AEO2017.156.ref_no_cpp-d120816a	millions	63.418125	64.162834	64.923637
2-AEO2017.157.ref_no_cpp-d120816a	billion 2009 \$	16397.19922	16651.75586	17114.08594
2-AEO2017.158.				
2-AEO2017.159.ref_no_cpp-d120816a	MMmtCO2	821.070679	782.990051	748.818726

10.851978	10.916043	10.931021	10.968797	11.013582	11.045136	11.054467	11.038449
14.802391	15.1948	15.45928	15.536628	15.685575	15.739321	15.796864	15.776176
0.260179	0.262545	0.2656	0.268828	0.274816	0.279577	0.282107	0.284308
65.668549	66.399567	67.122993	67.845917	68.569611	69.293129	70.016319	70.738373
17498.88672	17817.17578	18241.73828	18743.5293	19249.80078	19714.53711	20191.77344	20622.42773
774.56897	802.896362	817.893677	813.445312	823.912842	826.618652	832.273987	831.074219

11.007098	10.984044	10.971626	10.968724	10.959737	10.950525	10.953749	
15.717937	15.635497	15.683825	15.73264	15.650313	15.59329	15.656995	
0.286151	0.288694	0.291311	0.29378	0.296348	0.359006	0.481792	
71.458328	72.173126	72.882202	73.584625	74.280251	74.969666	75.65242	
20981.94922	21373.25586	21813.58984	22235.85156	22643.79297	23051.39063	23474.19922	
827.366333	823.25769	824.75354	828.2948	820.259399	815.431885	816.275269	

10.977886	11.021696	11.072535	11.121342	11.178217	11.251709	11.32407	
15.693645	15.760933	15.866843	15.975167	16.038582	16.148548	16.237022	
0.561448	0.588989	0.60739	0.591415	0.581353	0.599173	0.620539	
76.327957	76.995949	77.656441	78.311058	78.95932	79.601547	80.238747	
23972.35938	24525.69727	25074.66406	25618.13281	26183.86328	26807.71289	27377.61719	
816.052612	819.524963	824.988281	827.83374	832.870728	840.84436	845.361084	

11.389553	11.45121	11.514547	11.592774	11.675752	11.761646	11.849594	11.939045
16.266342	16.298859	16.368269	16.522633	16.587282	16.754709	16.873348	17.051994
0.630708	0.630708	0.630708	0.630708	0.630708	0.630708	0.630708	0.630708
80.871719	81.500786	82.12709	82.751266	83.373848	83.995399	84.609268	85.201004
27907.73828	28466.02539	29052.29688	29663.33008	30259.375	30846.85156	31429.76172	31987.48828
845.036987	845.239746	848.037231	855.84491	863.714111	874.825806	879.402466	886.967285

12.031096	12.125471	12.221449	0.40%
17.210527	17.319031	17.436285	0.50%
0.630708	0.630708	0.630708	2.70%
85.779037	86.359566	86.946472	0.90%
32541.97461	33141.27344	33744.83594	2.10%
894.897827	900.054077	907.821167	0.40%

Electric Power Projections by Electricity Market Module Region

https://www.eia.gov/outlooks/aeo/data/browser/#/?id=62-AEO2017®ion=3-16&cases=ref_no_cpp&start=2015&enc Mon Oct 02 2017 15:17:12 GMT-0400 (Eastern Daylight Time)

Source: U.S. Energy Information Administration

Net Summer Electricity Generating Capacity

(gigawatts)

Electric Power Sector

Coal

Oil and Natural Gas Steam 3

Combined Cycle

Combustion Turbine/Diesel

Nuclear Power

Pumped Storage

Fuel Cells

Renewable Sources

Distributed Generation

Total Capacity

Cumulative Planned Additions

Coal

Oil and Natural Gas Steam

Combined Cycle

Combustion Turbine/Diesel

Nuclear Power

Pumped Storage

Fuel Cells

Renewable Sources

Distributed Generation

Total Planned Additions

Cumulative Unplanned Additions

Coal

Oil and Natural Gas Steam

Combined Cycle

Combustion Turbine/Diesel

Nuclear Power

Pumped Storage

Fuel Cells

Renewable Sources

Distributed Generation

Total Unplanned Additions

Cumulative Electric Power Sector Additions

Cumulative Retirements

Coal

Oil and Natural Gas Steam

Combined Cycle

Combustion Turbine/Diesel

Nuclear Power

full name

Electricity: Electric Power Sector: Capacity: Coal: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Combined Cycle: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Combustion Turbine/Diesel: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Nuclear: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Pumped Storage: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Fuel Cells: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Renewable Sources: Reference case without Clean Power Plan Electricity: Electric Power Sector: Capacity: Distributed Generation: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Capacity: Total Capacity: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Cumulative Planned Additions: Coal: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Planned Additions: Oil and Natural Gas Steam: Reference case without Clean Electricity: Electric Power Sector: Cumulative Planned Additions: Combined Cycle: Reference case without Clean Power P Electricity: Electric Power Sector: Cumulative Planned Additions: Ombustion Turbine/Diesel: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Planned Additions: Nuclear: Reference case without Clean Power F Electricity: Electric Power Sector: Cumulative Planned Additions: Fuel Cells: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Planned Additions: Renewable Sources: Reference case without Clean Power Electricity: Electric Power Sector: Cumulative Planned Additions: Distributed Generation: Reference case without Clean P Electricity: Electric Power Sector: Cumulative Planned Additions: Total Planned Additions: Reference case without Clean I

Electricity: Electric Power Sector: Cumulative Unplanned Additions: Coal: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Unplanned Additions: Oil and Natural Gas Steam: Reference case without C Electricity: Electric Power Sector: Cumulative Unplanned Additions: Combined Cycle: Reference case without Clean Powe Electricity: Electric Power Sector: Cumulative Unplanned Additions: Combustion Turbine/Diesel: Reference case without Electricity: Electric Power Sector: Cumulative Unplanned Additions: Nuclear: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Unplanned Additions: Pumped Storage: Reference case without Clean Power Electricity: Electric Power Sector: Cumulative Unplanned Additions: Fuel Cells: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Unplanned Additions: Renewable Sources: Reference case without Clean Power Electricity: Electric Power Sector: Cumulative Unplanned Additions: Distributed Generation: Reference case without Clea Electricity: Electric Power Sector: Cumulative Unplanned Additions: Total Unplanned Additions: Reference case without Clean Electricity: Electric Power Sector: Cumulative Unplanned Additions: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Cumulative Retirements: Coal: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Retirements: Oil and Natural Gas Steam: Reference case without Clean Pow Electricity: Electric Power Sector: Cumulative Retirements: Combined Cycle: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Retirements: Combustion Turbine/Diesel: Reference case without Clean Power Plan Electricity: Electric Power Sector: Cumulative Retirements: Nuclear: Reference case without Clean Power Plan

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api key
62-AEO2017.2.
62-AEO2017.3.
62-AEO2017.4.
62-AEO2017.5.ref no cpp-d120816a
Electricity: Electric Power Sector: Capacity: Oil and Natural Gas Steam: Reference case without Clean Power Plan
62-AEO2017.7.ref no cpp-d120816a
62-AEO2017.8.ref_no_cpp-d120816a
62-AEO2017.9.ref no cpp-d120816a
62-AEO2017.10.ref no cpp-d120816a
62-AEO2017.11.ref_no_cpp-d120816a
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62-AEO2017.13.ref_no_cpp-d120816a
62-AEO2017.14.ref no cpp-d120816a
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62-AEO2017.21.ref no cpp-d120816a
62-AEO2017.22.ref_no_cpp-d120816a
62-AEO2017.23.ref_no_cpp-d120816a
62-AEO2017.24.ref_no_cpp-d120816a
62-AEO2017.25.ref no cpp-d120816a
62-AEO2017.26.ref_no_cpp-d120816a
62-AEO2017.27.
62-AEO2017.28.ref_no_cpp-d120816a
62-AEO2017.29.ref_no_cpp-d120816a
62-AEO2017.30.ref_no_cpp-d120816a
62-AEO2017.31.ref_no_cpp-d120816a
62-AEO2017.32.ref no cpp-d120816a
62-AEO2017.33.ref_no_cpp-d120816a
62-AEO2017.34.ref_no_cpp-d120816a
62-AEO2017.35.ref no cpp-d120816a
62-AEO2017.36.ref no cpp-d120816a
62-AEO2017.37.ref_no_cpp-d120816a
62-AEO2017.38.ref_no_cpp-d120816a
62-AEO2017.40.
62-AEO2017.41.ref no cpp-d120816a
62-AEO2017.42.ref no cpp-d120816a
62-AEO2017.43.ref_no_cpp-d120816a
62-AEO2017.44.ref_no_cpp-d120816a
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62-AEO2017.45.ref_no_cpp-d120816a

units	2015	2016	2017	2018	2019
GW	21.111002	20.996002	20.673	19.9655	18.017002
62-AEO2017.6.ref_no_cpp-d120816a	GW	2.3867	2.384	2.384	2.384
GW	12.661402	14.032502	15.654502	14.744502	14.744502
GW	13.609999	13.609999	13.609999	13.577099	13.560998
GW	15.237803	15.237803	15.237803	15.237803	16.337805
GW	5.719	5.719	5.719	5.719	5.719
GW					
GW	5.866404	6.828104	8.520905	8.520905	8.520905
GW					
GW	76.592308	78.807411	81.79921	80.148811	79.28421
GW					
GW		-			
GW			1.622	1.622	1.622
GW					
GW					1.1
GW					
GW					
GW			1.6928	1.6928	1.6928
GW					
GW			3.314801	3.314801	4.414801
GW					
GW			3.314801	3.314801	4.414801
GW			0.323	1.0305	2.979
GW					
GW				0.91	0.91
GW				0.0329	0.049
GW		-			

2027	2026	2025	2024	2023	2022	2021	2020
16.193501	16.193501	16.193501	16.193501	16.193501	16.193501	16.193501	16.630501
1.576	1.576	1.576	1.576	1.576	1.892	2.157	2.384
15.439669	14.939359	14.22449	13.819155	13.570501	13.570501	13.651701	14.624502
12.738501	12.738501	13.120501	13.120501	13.120501	13.120501	13.120501	13.1741
17.437803	17.437803	17.437803	17.437803	17.437803	17.437803	17.437803	17.437803
5.719	5.719	5.719	5.719	5.719	5.719	5.719	5.719
8.686075	8.638797	8.576907	8.541112	8.520905	8.520905	8.520905	8.520905
77.79055	77.242958	76.848206	76.407074	76.138214	76.138214	76.535416	78.263809
1.622	1.622	1.622	1.622	1.622	1.622	1.622	1.622
2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928
5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801
1.869167	1.368858	0.653989	0.248653				
1.005107	1.500050	0.033303	0.240033				
0.165171	0.117893	0.056002	0.020208				
2.034338	1.48675	0.709991	0.268861				
7.549139	7.001552	6.224792	5.783662	5.514801	5.514801	5.514801	5.514801
4.8025	4.8025	4.8025	4.8025	4.8025	4.8025	4.8025	4.3655
0.808	0.808	0.808	0.808	0.808	0.808	0.492	0.227
2.084	2.084	2.084	2.084	2.084	2.084	2.0028	1.03
0.871499	0.871499	0.489499	0.489499	0.489499	0.489499	0.489499	0.435899

2035	2034	2033	2032	2031	2030	2029	2028
15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	16.193501
1.576	1.576	1.576	1.576	1.576	1.576	1.576	1.576
19.945387	19.945387	18.751356	18.363819	17.762497	17.105606	16.548952	15.456748
12.792906	12.855906	12.734373	12.699392	12.707792	12.6133	12.6133	12.7033
16.104338	16.604818	17.305182	17.505188	17.505188	17.704803	17.615805	17.526804
5.719	5.719	5.719	5.719	5.719	5.719	5.719	5.719
15.040785	12.522982	11.308209	10.234022	10.234022	9.984236	9.984236	9.984236
87.121925	85.167595	83.337631	82.040924	81.448006	80.646446	80.000793	79.159592
1.622	1.622	1.622	1.622	1.622	1.622	1.622	1.622
1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022
2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928
5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801
6.374887	6.374887	5.180857	4.793318	4.191997	3.535106	2.978452	1.886246
0.251006	0.251006	0.129473	0.094492	0.094492	3.333100	2.370432	1.000240
6.519879	4.002077	2.787305	1.713118	1.713118	1.463331	1.463331	1.463331
13.145772	10.62797	8.097635	6.600928	5.999606	4.998437	4.441783	3.349577
18.660572	16.142771	13.612436	12.115729	11.514407	10.513238	9.956584	8.864378
5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	4.8025
0.808	0.808	0.808	0.808	0.808	0.808	0.808	0.808
2.084	2.084	2.084	2.084	2.084	2.084	2.084	2.084
1.068099	1.005099	1.005099	1.005099	0.996699	0.996699	0.996699	0.906699
1.600464	1.099986	0.399624	0.199616	0.199616			

2036	2037	2038	2039	2040	2041	2042	2043	
15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	
1.576	1.576	1.576	1.576	1.576	1.576	1.576	0.786	
19.974661	20.936487	21.572054	22.275274	22.846941	23.943192	25.015892	25.59985	
12.792906	12.792906	12.792906	12.965919	13.008593	13.008593	13.324753	13.737419	
16.104338	16.018869	16.13587	16.050659	16.186659	15.986787	15.787324	15.587061	
5.719	5.719	5.719	5.719	5.719	5.719	5.719	5.719	
16.648123	16.851988	16.946478	17.028254	17.028254	18.247213	18.38607	19.138512	
88.758537	89.838753	90.685814	91.558609	92.308945	94.424286	94.96254	96.511345	
1.622	1.622	1.622	1.622	1.622	1.622	1.622	1.622	
2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	
1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	
5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	
6.540961	7.502786	8.138354	8.841574	9.41324	10.509492	11.582192	12.16615	
0.251006	0.251006	0.251006	0.43302	0.475693	0.475693	0.791853	1.204519	
8.12722	8.331084	8.425574	8.50735	8.50735	9.726309	9.865166	10.617608	
14.919187	16.084877	16.814934	17.781944	18.396282	20.711494	22.239212	23.988277	
20.433987	21.599678	22.329735	23.296745	23.911083	26.226295	27.754013	29.503078	
5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	
0.808	0.808	0.808	0.808	0.808	0.808	1.598	1.598	
2.2208	2.2208	2.2208	2.2208	2.2208	2.2208	2.2208	2.2208	
1.068099	1.068099	1.068099	1.077099	1.077099	1.077099	1.077099	1.077099	
1.600464	1.800933	1.800933	2.001143	2.001143	2.201016	2.400479	2.600741	

2044	2045	2046	2047	2048	2049	2050	Growth (2016-2050)
15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	15.943501	-0.80%
0.786	0.786	0.786	0.786	0.786	0.786	0.786	0.786
26.556795	27.199266	27.290884	27.709394	28.098669	28.73665	29.503492	2.20%
14.454174	14.541835	14.769217	14.977119	15.585061	15.829622	16.037573	0.50%
14.886968	14.886968	14.886968	14.686428	14.686428	14.686428	14.686428	-0.10%
5.719	5.719	5.719	5.719	5.719	5.719	5.719	0.00%
19.36755	19.421162	21.003485	22.701553	22.761599	23.430307	23.44953	3.70%
				0.0193	0.039534	0.060319	
97.713989	98.497742	100.399063	102.523003	103.599556	105.171051	106.185852	0.90%
1.622	1.622	1.622	1.622	1.622	1.622	1.622	
2.2	2.2	2.2	2.2	2.2	2.2	2.2	
	4 5555	4 5000	4 5000		4 5000	4	
1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	1.6928	
E E14001	E E14001	F F1 4001	F F14001	E E14001	F F14001	F F14001	
5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	5.514801	
13.123096	13.765568	13.857183	14.275696	14.664968	15.302949	16.069794	
1.921274	2.008935	2.236316	2.783219	3.391161	3.635722	3.843672	
				0.001101	0.0007.22	0.0.0072	
10.846645	10.900258	12.48258	14.18065	14.240694	14.909403	14.928625	
				0.0193	0.039534	0.060319	
25.891016	26.674763	28.576078	31.239567	32.31612	33.887611	34.902405	
31.405817	32.189564	34.090881	36.754368	37.830921	39.402412	40.417206	
5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	5.0525	
1.598	1.598	1.598	1.598	1.598	1.598	1.598	
2.2208	2.2208	2.2208	2.2208	2.2208	2.2208	2.2208	
1.077099	1.077099	1.077099	1.416099	1.416099	1.416099	1.416099	
3.300835	3.300835	3.300835	3.501375	3.501375	3.501375	3.501375	

Pumped Storage Fuel Cells Renewable Sources Total **End-Use Sectors** Coal Petroleum **Natural Gas** Other Gaseous Fuels Renewable Sources Other Total **Electricity Sales** (billion kilowatthours) Residential Commercial/Other Industrial Transportation **Total Sales** Net Energy for Load (billion kilowatthours) **Gross International Imports Gross International Exports Gross Interregional Electricity Imports Gross Interregional Electricity Exports** Purchases from Combined Heat and Power **Electric Power Sector Generation for Customers** Total Net Energy for Load Generation by Fuel Type (billion kilowatthours) **Electric Power Sector** Coal Petroleum **Natural Gas** Nuclear Pumped Storage/Other Renewable Sources Distributed Generation **Total Generation** Sales to Customers Generation for Own Use **End-Use Sectors** Coal

Petroleum

Natural Gas

Other Gaseous Fuels

Renewable Sources

Other

Electricity: Electric Power Sector: Cumulative Retirements: Pumped Storage: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Cumulative Retirements: Fuel Cells: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Cumulative Retirements: Renewable Sources: Reference case without Clean Power Plar

Electricity: Electric Power Sector: Cumulative Retirements: Total: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Capacity: Coal: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Capacity: Petroleum: Reference case without Clean Power Plan Electricity: End-Use Sectors: Capacity: Natural Gas: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Capacity: Other Gaseous Fuels: Reference case without Clean Power Plan Electricity: End-Use Sectors: Capacity: Renewable Sources: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Capacity: Other: Reference case without Clean Power Plan Electricity: End-Use Sectors: Capacity: Total: Reference case without Clean Power Plan

Electricity: Electricity Demand: Residential: Reference case without Clean Power Plan

Electricity: Electricity Demand: Commercial/Other: Reference case without Clean Power Plan

Electricity: Electricity Demand: Industrial: Reference case without Clean Power Plan

Electricity: Electricity Demand: Transportation: Reference case without Clean Power Plan

Electricity: Electricity Demand: Total Sales: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Gross International Imports: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Gross International Exports: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Gross Interregional Electricity Imports: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Gross Interregional Electricity Exports: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Purchases from Combined Heat and Power: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Electric Power Sector Generation for Custome: Reference case without Clean Power Plan

Electricity: Net Energy for Load: Total Net Energy for Load: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Coal: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Petroleum: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Natural Gas: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Nuclear: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Pumped Storage/Other: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Renewable Sources: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Distributed Generation: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Total Generation: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Sales to Customers: Reference case without Clean Power Plan

Electricity: Electric Power Sector: Generation: Generation for Own Use: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Coal: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Petroleum: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Natural Gas: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Other Gaseous Fuels: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Renewable Sources: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Other: Reference case without Clean Power Plan

- 62-AEO2017.46.ref_no_cpp-d120816a
- 62-AEO2017.47.ref_no_cpp-d120816a
- 62-AEO2017.48.ref no cpp-d120816a
- 62-AEO2017.49.ref_no_cpp-d120816a
- 62-AEO2017.52.
- 62-AEO2017.53.ref_no_cpp-d120816a
- 62-AEO2017.54.ref_no_cpp-d120816a
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- 62-AEO2017.56.ref_no_cpp-d120816a
- 62-AEO2017.57.ref_no_cpp-d120816a
- 62-AEO2017.58.ref no cpp-d120816a
- 62-AEO2017.59.ref_no_cpp-d120816a
- 62-AEO2017.61.
- 62-AEO2017.62.
- 62-AEO2017.63.ref_no_cpp-d120816a
- 62-AEO2017.64.ref_no_cpp-d120816a
- 62-AEO2017.65.ref_no_cpp-d120816a
- 62-AEO2017.66.ref no cpp-d120816a
- 62-AEO2017.67.ref_no_cpp-d120816a
- 62-AEO2017.69.
- 62-AEO2017.70.ref no cpp-d120816a
- 62-AEO2017.71.ref no cpp-d120816a
- 62-AEO2017.72.ref_no_cpp-d120816a
- 62-AEO2017.73.ref no cpp-d120816a
- 62-AEO2017.74.ref no cpp-d120816a
- 62-AEO2017.75.ref no cpp-d120816a
- 62-AEO2017.76.ref_no_cpp-d120816a
- 62-AEO2017.78.
- 62-AEO2017.79.
- 62-AEO2017.80.
- 62-AEO2017.81.ref_no_cpp-d120816a
- 62-AEO2017.82.ref_no_cpp-d120816a
- 62-AEO2017.83.ref no cpp-d120816a
- 62-AEO2017.84.ref no cpp-d120816a
- 62-AEO2017.85.ref no cpp-d120816a
- 62-AEO2017.86.ref_no_cpp-d120816a
- 62-AEO2017.87.ref_no_cpp-d120816a
- 62-AEO2017.88.ref no cpp-d120816a
- 62-AEO2017.89.ref no cpp-d120816a
- 62-AEO2017.90.ref_no_cpp-d120816a
- 62-AEO2017.93.
- 62-AEO2017.94.ref_no_cpp-d120816a
- 62-AEO2017.95.ref_no_cpp-d120816a
- 62-AEO2017.96.ref_no_cpp-d120816a
- 62-AEO2017.97.ref no cpp-d120816a
- 62-AEO2017.98.ref_no_cpp-d120816a
- 62-AEO2017.99.ref_no_cpp-d120816a

GW					
GW					
GW					
GW			0.323	1.9734	3.938
GW	0.151552	0.149702	0.148896	0.147556	0.145952
GW	0.012848	0.012832	0.012839	0.012834	0.012823
GW	0.108649	0.115559	0.12171	0.110981	0.117237
GW					
GW	0.887993	0.94354	1.01283	1.082526	1.153939
GW	0.072734	0.072734	0.072734	0.072734	0.072734
GW	1.233777	1.294367	1.369009	1.42663	1.502684
BkWh	125.383965	127.386932	123.505714	124.179497	123.699829
BkWh	110.702301	111.573242	109.82		
BkWh	59.515846	58.997181	60.693104	62.846836	64.95623
BkWh	0.552693	0.651156	0.75651	0.860964	1.026962
BkWh		298.608521		298.086945	
BkWh					
BkWh					
BkWh	33.713139	35.470039	38.162853	27.772623	21.407776
BkWh	0.39172	0.286288	0.220661	0.348163	0.82477
BkWh	0.371627	0.379413	0.387472	0.373745	0.38183
BkWh	306.241791	282.24118	275.021545	288.679321	297.23584
BkWh	339.934845	317.804352	313.351196	316.477539	318.200684
BkWh	85.512451	66.625702	43.847092	48.960804	62.679024
BkWh	1.559176	1.710086	1.593484	1.602442	1.660022
BkWh	85.433594	80.42131	93.461044	101.290794	92.26445
BkWh	123.313004	124.191231	123.815193	123.214828	126.492668
BkWh	-1.3607	-1.088848	-1.086537	-1.086537	-1.086537
BkWh	12.21928	11.076218	14.08573	15.333507	15.815808
BkWh					
BkWh	306.676819	282.93573	275.715973	289.315796	297.825409
BkWh	306.241791	282.24118	275.021545	288.679321	297.23584
BkWh	0.435013	0.694523	0.694424	0.636477	0.589567
BkWh	0.626009	0.616793	0.612772	0.606086	0.598089
BkWh	0.020451	0.0202	0.020243	0.02018	0.020082
BkWh	0.593536	0.631753	0.6666	0.643016	0.679035
BkWh					
BkWh	4.032772	4.06136	4.147578	4.216365	4.271845
BkWh	0.251692	0.251692	0.251692	0.251692	0.251692

6.058398	7.786798	8.183998	8.183998	8.183998	8.183998	8.565998	8.565998	
0.145021	0.144506	0.143944	0.143409	0.142401	0.140787	0.139083	0.138029	
0.012827	0.012841	0.012854	0.012869	0.012872	0.01286	0.012845	0.012847	
0.123759	0.130898	0.138699	0.147109	0.156065	0.165738	0.176457	0.188268	
0.120,03	0,100050	0,100033	01217203	0.130003	0,103,00	0.127 0 137	01200200	
1.235872	1.326193	1.411857	1.497858	1.591085	1.693403	1.810158	1.949158	
0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	
1.590212	1.687171	1.780088	1.873979	1.975156	2.085522	2.211277	2.361035	
123.419067	123.885384	124.910339	126.157173	127.491364	128.810226	130.11264	131.477646	
110.298882	110.72831	111.550949	112.593628	113.742172	114.887199	115.884842	116.970268	
66.24498	67.842155	69.845673	71.593315	72.687782	73.296059	73.65995	73.983864	
1.242011	1.531301	1.863359	2.231915	2.631545	3.052054	3.462062	3.848357	
301.204926	303.987183	308.170288	312.576019	316.552856	320.045532	323.119476	326.280121	
301.20 1320	303.307103	300.170200	312.370013	310.332030	320.0 13332	323.113 170	320.200121	
16.618057	15.184009	16.636551	17.222851	15.804668	18.868235	22.586105	26.936935	
5.614865	5.479783	7.183387	5.846575	5.836324	5.231659	5.101405	4.955261	
0.390997	0.401515	0.412851	0.425039	0.437737	0.451115	0.465989	0.483179	
307.999695	312.042511	316.460266	319.193115	324.696838	324.718689	324.117523	322.934113	
319.39389	322.148254	326.326294	330.994446	335.102905	338.806366	342.068207	345.398956	
79.317123	79.582405	85.630737	86.388733	94.806824	95.254234	95.136856	96.645576	
1.723351	1.72218	1.746504	1.747454	1.780921	1.476844	1.012001	0.785618	
78.623497	77.590843	74.330811	76.316422	72.801605	72.606255	72.472488	69.60685	
134.141037	138.948425	139.940491	139.940491	139.940491	139.940491	139.940491	139.940491	
-1.086537	-1.086537	-1.086537	-1.086537	-1.085935	-1.085083	-1.084071	-1.083382	
15.82389	15.827829	16.440878	16.42919	16.995564	17.068584	17.182409	17.581581	
200 542220	242 505444	317 003800	240 725740	225 220474	225 261222	224 660156	222 476746	
		317.002899				324.660156		
307.999695	312.042511		319.193115		324.718689		322.934113	
0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	
0.593444	0.590876	0.588071	0.585405	0.580376	0.572327	0.56383	0.55857	
0.020117	0.020241	0.020353	0.020472	0.020492	0.020378	0.020236	0.020238	
0.717012	0.758883	0.804416	0.853441	0.905563	0.961761	1.02406	1.09296	
4.371983	4.500799	4.622041	4.747354	4.863114	4.966136	5.08416	5.264816	
0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	

8.601198	8.941197	8.941197	9.140813	9.149213	9.349221	10.049583	10.613061	
0.137026	0.135821	0.134363	0.133046	0.131795	0.13075	0.129623	0.128466	
0.01285	0.012848	0.012838	0.012832	0.012827	0.012829	0.012828	0.012827	
0.201096	0.215119	0.23038	0.245929	0.261691	0.27759	0.293879	0.310425	
2.105897	2.281027	2.476343	2.694681	2.939477	3.207336	3.49541	3.805258	
0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	
2.529603	2.717549	2.926658	3.159222	3.418524	3.701239	4.004474	4.329709	
132.830978	134.126404	135.242386	136.417252	137.5625	138.715591	139.97197	141.288177	
118.10746	119.273216	119.930664	120.729187	121.643089	122.607735	123.665474	124.802071	
73.954788	73.928894	73.871658	73.724892	73.641571	73.771461	74.167343	74.573601	
4.213673	4.564127	4.908585	5.236457	5.545583	5.846823	6.143322	6.425522	
329.106903	331.892639	333,953308	336.107788	338.392761	340.94162	343.94812	347.089386	
0_0,_0			555.2577.65	330.032732	0.000.1202	0.0.0.0		
20.949142	18.037106	17.807125	19.047005	16.264662	15.696465	14.199762	13.869397	
3.627753	2.581198	2.203202	1.279358	1.534136	1.344161	1.713387	1.498305	
0.501975	0.522727	0.545505	0.568864	0.593232	0.618384	0.644544	0.67177	
330.576233	335.381378	337.401794	337.508606	342.953735	346.033539	351.085693	354.507904	
348.399597	351.360016	353.551208	355.845123	358.277496	361.004211	364.216614	367.550781	
99.573723	99.764313	98.312592	95.324287	92.076729	90.102051	93.971619	93.255989	
0.625884	0.591569	0.527814	0.513551	0.501001	0.472236	0.485429	0.482135	
71.595917	75.000565	77.819733	82.110153	90.691132	95.724899	100.155663	103.453957	
140.641876	141.34227	142.043167	140.436722	140.436722	138.827377	133.191803	129.164459	
-1.083321	-1.083321	-1.083321	-1.082488	-1.082488	-1.082488	-1.082488	-1.082488	
19.764767	20.308586	20.324429	20.749016	20.873295	22.532059	24.906319	29.776491	
331.118866	335.924011	337.944427	338.051239	343,496368	346.576172	351.628326	355.050537	
	335.381378		337.508606					
0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	
0.55357	0.54756	0.540288	0.533719	0.527479	0.522267	0.516646	0.510877	
0.020252	0.020221	0.020129	0.020065	0.020018	0.020028	0.020015	0.019995	
1.167904	1.250133	1.339833	1.431311	1.524501	1.618988	1.716052	1.815045	
5.473186	5.695961	5.932252	6.207567	6.54318	6.918394	7.318834	7.749282	
0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	

10.749862	10.95033	10.95033	11.159539	11.159539	11.359413	12.348876	12.549138	
0.127313	0.12637	0.125491	0.12443	0.123414	0.12253	0.121684	0.120798	
0.012825	0.012831	0.012839	0.012841	0.012845	0.012855	0.012868	0.012879	
0.327332	0.344492	0.361946	0.379844	0.398003	0.416704	0.435885	0.455827	
4.135943	4.491361	4.869176	5.266452	5.688442	6.135143	6.60708	7.104864	
0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	
4.676146	5.047788	5.442186	5.856301	6.295438	6.759966	7.250251	7.767103	
142.637177	143.924103	145.310944	146.699585	147.347412	147.991913	148.654022	149.463852	
125.990402	127.233032	128.554993	129.955841	131.318802	132.780701	134.283234	135.882065	
74.860069			76.29908					
6.688994	75.296288	75.903397		76.68335	77.057465	77.205879	77.573814	
	6.938684	7.177734	7.409441	7.636369	7.83076	8.020277	8.201255	
350.176636	353.39212	356.947052	360.363953	362.985931	365.660828	368.163422	371.120972	
12 120404	10.021260	12 544700	11 702220	12 270201	11 212105	10 214007	0.191676	
12.128404	10.031269	12.544708	11.783328	13.378291	11.313185	10.214097	9.181676	
1.672033	2.375588	1.663932	1.756766	2.037745	2.885314	3.835404	3.952055	
0.70018	0.730424	0.762386	0.796456	0.832788	0.872804	0.916851	0.966555	
359.695465	365.990112	366.451233	370.916748	372.384949	378.209442	382.84964	387.129761	
370.85202	374.376221	378.094391	381.739777	384.558289	387.510132	390.145172	393.325928	
92.450798	97.318245	96.839127	96.224739	94.59256	94.77861	94.715775	94.744659	
0.477532	0.497515	0.408722	0.405775	0.399851	0.399398	0.399127	0.399243	
105.7733	107.219322	106.641426	112.224464	114.228416	119.745461	124.900574	129.364746	
129.164459	128.457367	129.378769	128.673126	129.744171	128.135864	126.530731	124.919533	
-1.082354	-1.082353	-1.082346	-1.0821	-1.081739	-1.081587	-1.081465	-1.081361	
33.454372	34.122684	34.808128	35.013363	35.044312	36.774338	37.927521	39.325558	
360.238098	366.532745	366.993866	371.459381	372.927582	378.752075	383.392273	387.672394	
359.695465	365.990112		370.916748			382.84964		
0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	
0.3 12037	0.5 12057	0.5 12057	0.3 12037	0.5 12057	0.3 12037	0.3 12037	0.3 12037	
0.505123	0.500423	0.496036	0.490747	0.485678	0.481269	0.477052	0.472633	
0.019971	0.020014	0.02008	0.02009	0.020116	0.02019	0.020284	0.020372	
1.916436	2.020015	2.125825	2.234774	2.345963	2.461256	2.580427	2.70551	
8.210124	8.720541	9.268323	9.83402	10.439587	11.090141	11.780731	12.507704	
0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	

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13.249231	13.249231	13.249231	13.788772	13.788772	13.788772	- 13.788772 -	- -
0.119834	0.118877	0.117846	0.11672	0.115618	0.114534	0.113418	-0.80%
0.012888	0.012898	0.012905	0.012908	0.012912	0.012918	0.012922	0.00%
0.47703	0.498453	0.52008	0.541985	0.564159	0.586596	0.609457	5.00%
						-	-
7.630116	8.186687	8.774278	9.394132	10.050147	10.744102	11.478258	7.60%
0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.072734	0.00%
8.312601	8.889649	9.497843	10.138478	10.815569	11.530884	12.286789	6.80%
150.375916	151.326904	152.260803	153.165329	153.997742	154.827606	155.639618	0.60%
137.537872	139.232361	140.998703	142.778976	144.620438	146.525101	148.504517	0.80%
77.972763	78.245918	78.502365	78.823608	79.205559	79.658005	80.189774	0.90%
8.373162	8.530333	8.68045	8.82667	8.966972	9.107493	9.250798	8.10%
374.259674	377.33551	380.442322	383.594574	386.790741	390.118195	393.584747	0.80%
						-	-
						-	-
9.526843	6.754283	7.497227	7.222116	9.218066	9.170923	8.247315	-4.20%
3.78101	6.088071	7.275722	11.18412	9.512402	8.882975	9.021556	10.70%
1.024281	1.083046	1.142996	1.203898	1.266028	1.329414	1.394311	3.90%
389.916016	398.177765	401.956543	409.555176	409.355042	412.424377	417.244659	1.20%
396.686127	399.927032	403.321045	406.797058	410.326721	414.041748	417.864716	0.80%
97.138321	100.305397	100.248528	100.42305	98.451355	99.899948	100.17466	1.20%
0.409635	0.423165	0.421964	0.421221	0.415763	0.42089	0.422989	-4.00%
134.676651	139.547791	140.683578	146.207642	147.198898	148.165085	152.314636	1.90%
119.286018		119.286018	117.672203	117.672203			-0.20%
-1.081272		-1.081081	-1.080969	-1.080868	-1.080799	-1.080645	0.00%
40.029301		42.940197	46.454647	47.231876	47.872387	48.257034	4.40%
40.025501	40.233102	42.540157	40.454047	0.008453	0.017316	0.02642 -	
390.458649	398.720398	402.499176	410.097809	409.897675	412.96701	417.787292	1.20%
389.916016	398.177765				412.424377		1.20%
0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	0.542657	-0.70%
0.467822	0.463053	0.457907	0.452291	0.446795	0.441393	0.435823	-1.00%
0.02044		0.020574	0.020591	0.020622	0.020668	0.020703	0.10%
2.840005	2.976194	3.11408	3.253883	3.39577	3.539737	3.686654	5.30%
2.0-0003	2.570154	3.11400	3.233003	3.33311	3.333737	-	-
13.270381	14.080667	14.932137	15.824999	16.773645	17.780243	18.843575	4.60%
0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.251692	0.00%

Total

Sales to the Grid

Generation for Own Use

Total Electricity Generation

End-Use Prices

(2016 cents per kilowatthour)

Residential

Commercial

Industrial

Transportation

All Sectors Average

(nominal cents per kilowatthour)

Residential

Commercial

Industrial

Transportation

All Sectors Average

Prices by Service Category

(2016 cents per kilowatthour)

Generation

Transmission

Distribution

(nominal cents per kilowatthour)

Generation

Transmission

Distribution

Fuel Consumption (quadrillion Btu)

Coal

Natural Gas

Oil

Total

Fuel Prices to the Electric Power Sector

(2016 dollars per million Btu)

Coal

Natural Gas

Distillate Fuel Oil

Residual Fuel Oil

(nominal dollars per million Btu)

Coal

Natural Gas

Distillate Fuel Oil

Residual Fuel Oil

Emissions from the Electric Power Sector

Total Carbon (million short tons)

Carbon Dioxide (million short tons)

Sulfur Dioxide (million short tons)

Nitrogen Oxide (million short tons)

Electricity: End-Use Sectors: Generation: Total: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Sales to the Grid: Reference case without Clean Power Plan

Electricity: End-Use Sectors: Generation: Generation for Own Use: Reference case without Clean Power Plan

Electricity: Total Electricity Generation: Reference case without Clean Power Plan

Electricity: End-Use Prices: Residential: Reference case without Clean Power Plan Electricity: End-Use Prices: Commercial: Reference case without Clean Power Plan Electricity: End-Use Prices: Industrial: Reference case without Clean Power Plan Electricity: End-Use Prices: Transportation: Reference case without Clean Power Plan Electricity: End-Use Prices: All Sectors Average: Reference case without Clean Power Plan

Electricity: End-Use Prices: Residential: Reference case without Clean Power Plan Electricity: End-Use Prices: Commercial: Reference case without Clean Power Plan Electricity: End-Use Prices: Industrial: Reference case without Clean Power Plan Electricity: End-Use Prices: Transportation: Reference case without Clean Power Plan Electricity: End-Use Prices: All Sectors Average: Reference case without Clean Power Plan

Electricity: Prices by Service Category: Generation: Reference case without Clean Power Plan Electricity: Prices by Service Category: Transmission: Reference case without Clean Power Plan Electricity: Prices by Service Category: Distribution: Reference case without Clean Power Plan

Electricity: Prices by Service Category: Generation: Reference case without Clean Power Plan Electricity: Prices by Service Category: Transmission: Reference case without Clean Power Plan Electricity: Prices by Service Category: Distribution: Reference case without Clean Power Plan

Electricity: Fuel Use: Coal: Reference case without Clean Power Plan

Electricity: Fuel Use: Natural Gas: Reference case without Clean Power Plan

Electricity: Fuel Use: Oil: Reference case without Clean Power Plan Electricity: Fuel Use: Total: Reference case without Clean Power Plan

Electricity: Fuel Prices: Coal: Reference case without Clean Power Plan

Electricity: Fuel Prices: Natural Gas: Reference case without Clean Power Plan Electricity: Fuel Prices: Distillate Fuel Oil: Reference case without Clean Power Plan Electricity: Fuel Prices: Residual Fuel Oil: Reference case without Clean Power Plan

Electricity: Fuel Prices: Coal: Reference case without Clean Power Plan

Electricity: Fuel Prices: Natural Gas: Reference case without Clean Power Plan Electricity: Fuel Prices: Distillate Fuel Oil: Reference case without Clean Power Plan Electricity: Fuel Prices: Residual Fuel Oil: Reference case without Clean Power Plan

Electricity: Emissions: Total Carbon: Reference case without Clean Power Plan Electricity: Emissions: Carbon Dioxide: Reference case without Clean Power Plan Electricity: Emissions: Sulfur Dioxide: Reference case without Clean Power Plan Electricity: Emissions: Nitrogen Oxide: Reference case without Clean Power Plan

- 62-AEO2017.100.ref_no_cpp-d120816a
- 62-AEO2017.101.ref_no_cpp-d120816a
- 62-AEO2017.102.ref_no_cpp-d120816a
- 62-AEO2017.104.ref_no_cpp-d120816a
- 62-AEO2017.106.
- 62-AEO2017.107.
- 62-AEO2017.108.ref_no_cpp-d120816a
- 62-AEO2017.109.ref_no_cpp-d120816a
- 62-AEO2017.110.ref_no_cpp-d120816a
- 62-AEO2017.111.ref_no_cpp-d120816a
- 62-AEO2017.112.ref_no_cpp-d120816a
- 62-AEO2017.113.
- 62-AEO2017.114.ref_no_cpp-d120816a
- 62-AEO2017.115.ref_no_cpp-d120816a
- 62-AEO2017.116.ref_no_cpp-d120816a
- 62-AEO2017.117.ref_no_cpp-d120816a
- 62-AEO2017.118.ref_no_cpp-d120816a
- 62-AEO2017.120.
- 62-AEO2017.121.
- 62-AEO2017.122.ref_no_cpp-d120816a
- 62-AEO2017.123.ref_no_cpp-d120816a
- 62-AEO2017.124.ref_no_cpp-d120816a
- 62-AEO2017.125.
- 62-AEO2017.126.ref_no_cpp-d120816a
- 62-AEO2017.127.ref_no_cpp-d120816a
- 62-AEO2017.128.ref_no_cpp-d120816a
- 62-AEO2017.130.
- 62-AEO2017.131.ref_no_cpp-d120816a
- 62-AEO2017.132.ref no cpp-d120816a
- 62-AEO2017.133.ref no cpp-d120816a
- 62-AEO2017.134.ref_no_cpp-d120816a
- 62-AEO2017.136.
- 62-AEO2017.137.
- 62-AEO2017.138.ref_no_cpp-d120816a
- 62-AEO2017.139.ref no cpp-d120816a
- 62-AEO2017.140.ref_no_cpp-d120816a
- 62-AEO2017.141.ref_no_cpp-d120816a
- 62-AEO2017.143.
- 62-AEO2017.144.ref no cpp-d120816a
- 62-AEO2017.145.ref_no_cpp-d120816a
- 62-AEO2017.146.ref_no_cpp-d120816a
- 62-AEO2017.147.ref_no_cpp-d120816a
- 62-AEO2017.150.
- 62-AEO2017.151.ref_no_cpp-d120816a
- 62-AEO2017.152.ref_no_cpp-d120816a
- 62-AEO2017.153.ref_no_cpp-d120816a
- 62-AEO2017.154.ref_no_cpp-d120816a

BkWh	5.52446	5.581798	5.698884	5.737339	5.820743	
BkWh	0.371627	0.379413	0.387472	0.373745	0.381837	
BkWh	5.152832	5.202384	5.311412	5.363594	5.438905	
BkWh	312.201294	288.517517	281.414856	295.053131	303.646149	
	312.201231	200.317317	201.111030	233.033131	303.010113	
2016 cents/kWh	11.784621	11.872649	11.955381	12.584991	12.748298	
2016 cents/kWh	8.868563	9.081696	9.207085	9.611286	9.649897	
			6.244115			
2016 cents/kWh	6.434236	6.145383		6.649597	6.668645	
2016 cents/kWh	8.215129	8.966403	9.898492	10.788484	11.449365	
2016 cents/kWh	9.516722	9.692469	9.751508	10.230912	10.290923	
nom cents/kWh	11.6199	11.872649	12.213091	13.109523	13.558526	
nom cents/kWh	8.7446	9.081696	9.405552	10.011877	10.263204	
nom cents/kWh	6.3443	6.145383	6.378713	6.926746	7.092477	
nom cents/kWh	8.100301	8.966403	10.111863	11.238139	12.177038	
nom cents/kWh	9.3837	9.692469	9.96171	10.657329	10.944971	
2016 cents/kWh	6.513523	6.971933	7.075676	7.003353	6.983119	
2016 cents/kWh	0.696638	0.718572	0.765022	0.800581	0.830617	
2016 cents/kWh	2.306561	2.001964	1.910809	2.426978	2.477188	
2018 cents/kwni	2.300301	2.001904	1.910009	2.420976	2.4//100	
nom cents/kWh	6.422479	6.971933	7.228199	7.295248	7.426936	
nom cents/kWh	0.686901	0.718572	0.781513	0.833949	0.883408	
nom cents/kWh	2.274321	2.001964	1.951998	2.528132	2.634627	
nom cents) kwn	2.274321	2.001304	1.551550	2.520152	2.034027	
quads	0.866289	0.675019	0.451073	0.492871	0.625728	
quads	0.673825	0.640515	0.733653	0.787867	0.719622	
quads	0.016804	0.020335	0.018992	0.019022	0.019664	
quads	1.556918	1.335869	1.203718	1.299761	1.365014	
quaus	1.550516	1.555605	1.203/18	1.299701	1,505014	
2016 \$/MMBtu	3.237725	3.023315	2.789507	3.156426	3.230269	
2016 \$/MMBtu	3.8658	3.646346	4.025491	4.158013	4.26968	
2016 \$/MMBtu	15.056554	11.818185	14.163211	16.18755	17.431654	
2016 \$/MMBtu	10.366503	7.984254	9.119544	10.174103	10.563137	
γ,	20.00000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	312233 1 1	1011, 1100	10.000107	
nom \$/MMBtu	3.192469	3.023315	2.849637	3.287983	3.435571	
nom \$/MMBtu	3.811765	3.646346	4.112265	4.331316	4.541042	
nom \$/MMBtu	14.846098	11.818185	14.468512	16.862234	18.539537	
nom \$/MMBtu	10.221602	7.984254	9.316125	10.598151	11.234486	
	10.121002	7.50 125 1	5.510125	20.000101	11.151100	
MMst	35.041023	30.176451	25.335295	27.21159	29.936913	
MMst	128.483643	110.647011	92.896088	99.775879	109.768578	
MMst	0.052639	0.041819	0.031872	0.041643	0.048415	
MMst	0.066	0.035753	0.029796	0.032569	0.038508	
	0.000	0.033733	0.023730	0.032303	0.030300	

5.954247	6.122491	6.286573	6.458363	6.621236	6.772294	6.943977	7.188276	
0.390997	0.401515	0.412851	0.425039	0.437737	0.451115	0.465989	0.483179	
5.56325	5.720975	5.873723	6.033323	6.183498	6.321179	6.477987	6.705096	
314.496582	318.707642	323.289459	326.194122	331.860718	332.03363	331.604126	330.665009	
12.955989	12.975379	12.891952	12.827207	12.738609	12.666225	12.611615	12.530606	
9.746078	9.691918	9.563437	9.458914	9.347889	9.262927	9.202348	9.123563	
6.690341	6.644852	6.589702	6.560698	6.518719	6.495571	6.469869	6.448972	
12.167172	12.655872	12.872545	13.003154	13.037585	13.039824	13.035324	12.944427	
10.402665	10.369135	10.263408	10.185456	10.100952	10.042241	10.001682	9.944438	
14.083856	14.410924	14.619075	14.842567	15.045741	15.285992	15.558661	15.813009	
10.594511	10.764194	10.844642	10.945062	11.040915	11.178786	11.352726	11.513488	
7.27276	7.380013	7.472518	7.591489	7.699346	7.839056	7.98173	8.138286	
13.226369	14.056068	14.597068	15.046159	15.398866	15.736862	16.081381	16.335232	
11.308255	11.516335	11.638387	11.785755	11.930369	12.119287	12.338847	12.549392	
7.046462	6.02500	6.04.4274	6 722 424	5 544720	6 520040	5 45 40 54	6 200074	
7.016162	6.93588	6.814371	6.722431	6.611728	6.528048	6.464851	6.388871	
0.860053	0.879774	0.88987	0.899858	0.913319	0.926485	0.938917	0.950487	
2.526451	2.55348	2.559168	2.563166	2.575906	2.587708	2.597915	2.605081	
7.626945	7.703239	7.727286	7.778633	7.8092	7.87825	7.975539	8.062441	
0.934923	0.977109	1.009085	1.04124	1.078733	1.118111	1.158321	1.199468	
2.746387	2.835988	2.902018	2.965881	3.042436	3.122925	3.204989	3.287484	
2.740307	2.033300	2.302010	2.903001	3.042430	3.122323	3.204303	3.207404	
0.789729	0.791971	0.85154	0.859432	0.947983	0.952491	0.953558	0.969317	
0.619441	0.614474	0.588342	0.602691	0.57492	0.570151	0.554752	0.520481	
0.020319	0.020295	0.020559	0.020559	0.020946	0.017577	0.012076	0.00933	
1.429489	1.42674	1.46044	1.482682	1.54385	1.540219	1.520386	1.499128	
3.257733	3.185575	3.13858	3.085374	3.042984	2.997589	2.974016	2.937904	
4.454499	4.563202	4.677842	4.810896	4.911258	4.991539	5.089895	5.271454	
18.068127	18.584097	19.030939	19.387701	19.669785	20.167744	20.598606	20.749956	
10.602925	10.470623	10.245373	10.600844	10.883451	11.257548	11.586585	11.738388	
3.54133	3.538014	3.559052	3.570136	3.59411	3.617583	3.668976	3.70749	
4.842279	5.068058	5.304528	5.566765	5.800753	6.023944	6.279287	6.652316	
19.641024	20.640169	21.580498	22.433821	23.232244	24.339054	25.412029	26.185427	
11.525949	11.629052	11.617936	12.266407	12.854589	13.585958	14.294105	14.813269	
22.0674.04	22.425.460	24 40577	24.005570	27 224502	27 255025	26.076500	26 000552	
33.067184	33.125488	34.49577	34.996578	37.221592	37.255936	36.976509	36.890553	
121.246269	121.460144	126.484467	128.320831	136.479141	136.605087	135.580475	135.265305	
0.055143	0.049223	0.050168	0.051153	0.050522	0.043228	0.039248	0.038683	
0.038142	0.036833	0.039911	0.0402	0.043106	0.043151	0.04289	0.042283	

7.466602	7.765566	8.084194	8.444353	8.866871	9.331369	9.823238	10.34689	
0.501975	0.522727	0.545505	0.568864	0.593232	0.618384	0.644544	0.67177	
6.964626	7.242839	7.538689	7.875488	8.273638	8.712984	9.178694	9.67512	
338.58548	343.689575	346.028625	346.495605	352.363251	355.907532	361.451569	365.39743	
12.481013	12.42776	12.38221	12.404316	12.41141	12.414229	12.449697	12.493436	
9.077414	9.021206	8.983237	8.995499	8.99203	8.981249	8.995418	9.018929	
6.421577	6.398439	6.378808	6.413084	6.417961	6.435047	6.484483	6.540358	
12.904311	12.834475	12.760712	12.734985	12.708545	12.646968	12.603477	12.574153	
9.91382	9.877727	9.851993	9.884997	9.898328	9.906873	9.942618	9.986618	
16.108385	16.405506	16.717398	17.124058	17.50507	17.873301	18.280577	18.695559	
11.715593	11.908618	12.128395	12.418213	12.682371	12.930692	13.208467	13.4962	
8.287889	8.446383	8.61212	8.853209	9.051901	9.264815	9.521523	9.78719	
16.654707	16.942398	17.228416	17.580544	17.924149	18.208384	18.50638	18.816345	
12.795086	13.039285	13.301314	13.646159	13.960615	14.263351	14.599294	14.944279	
6.32954	6.270967	6.222219	6.227097	6.207004	6.178117	6.178447	6.192921	
0.962821	0.97385	0.984536	0.996671	1.010425	1.027659	1.045909	1.063123	
2.62146	2.63291	2.645237	2.66123	2.680899	2.701097	2.718261	2.730575	
8.169102	8.278111	8.400705	8.596457	8.754367	8.894901	9.072154	9.267275	
1.242647	1.285549	1.329236	1.375896	1.425105	1.479565	1.535766	1.590889	
3.383338	3.475625	3.571372	3.673806	3.781144	3.888887	3.991373	4.086116	
0.998864	1.001022	0.986196	0.956127	0.920379	0.900037	0.939245	0.931761	
0.527016	0.54121	0.549508	0.576162	0.634677	0.667503	0.691041	0.714798	
0.007136	0.006705	0.005956	0.005794	0.005643	0.005302	0.005446	0.005407	
1.533016	1.548936	1.54166	1.538083	1.560699	1.572843	1.635732	1.651966	
2.913976	2.888216	2.888789	2.91	2.924576	2.938739	2.983164	3.017976	
5.316324	5.376325	5.427634	5.486707	5.468369	5.427743	5.438128	5.476472	
20.761665	21.035891	21.464365	21.902315	22.338736	22.261492	22.584698	22.727158	
11.767356	11.988345	12.374551	12.715327	13.109318	13.065008	13.386085	13.53843	
2.760060	2.012645	2.000105	4.017331	4 124026	4 22402	4 200244	4 516101	
3.760868	3.812645	3.900195	4.017231	4.124826	4.23103	4.380344	4.516191	
6.861414	7.097122	7.327926	7.574354	7.712594	7.814556	7.985102	8.195159	
26.795654	27.768835	28.979343	30.23597	31.506582	32.050831	33.162354	34.009609	
15.187317	15.825448	16.707056	17.553406	18.489399	18.810255	19.655523	20.259319	
37.877937	38.211712	37.942467	37.481529	37.359699	37.284653	38.82106	38.9799	
138.885757	140.109451	139.122375	137.432251	136.985504	136.710327	142.343887	142.926376	
0.037151	0.034444	0.032093	0.031552	0.03092	0.03062	0.031191	0.031023	
0.037131	0.034444	0.032093	0.031552	0.03092	0.03062	0.031191	0.031023	
0.042001	0.041311	0.033430	0.030333	0.030373	0.03/034	0.03/300	0.03/30/	

10.903346	11.512685	12.161957	12.831323	13.543036	14.304547	15.110187	15.957911	
0.70018	0.730424	0.762386	0.796456	0.832788	0.872804	0.916851	0.966555	
10.203166	10.782262	11.399569	12.034865	12.710246	13.431742	14.193334	14.991355	
371.141449	378.045441	379.155823	384.29071	386.470612	393.05661	398.502472	403.63031	
371.171773	370.043441	373.133023	304.23071	300.470012	333.03001	330.302472	403.03031	
12.524201	12.558182	12.585933	12.608752	12.657721	12.746369	12.811078	12.850311	
9.033301	9.044703	9.047822	9.052238	9.053613	9.088405	9.109619	9.108892	
6.568311	6.59235	6.603982	6.622259	6.629281	6.674133	6.701514	6.715683	
12.560015	12.549525	12.538859	12.514976	12.495308	12.499943	12.495234	12.459015	
10.017418	10.045566	10.064376	10.084533	10.107287	10.166446	10.209236	10.228985	
10.006121	10 505706	10.017000	20 227200	20.8167	21 200002	21 020160	22 465049	
19.096121	19.505796	19.917089	20.337208	20.8167	21.386993	21.938169	22.465048	
13.773414	14.04854	14.31807	14.600752	14.889438	15.249334	15.599652	15.924259	
10.014952	10.239462	10.450723	10.681331	10.902418	11.198456	11.475923	11.740426	
19.150726	19.49235	19.842596	20.185953	20.549599	20.973518	21.397308	21.780979	
15.273933	15.603114	15.926755	16.265785	16.622297	17.058168	17.482677	17.882418	
6.406485	6.4072.47	6.402200	6.400000	6.402704	6 207202	6.224.050	6 240502	
6.196485	6.197347	6.192299	6.189823	6.182704	6.207382	6.221859	6.219592	
1.077956	1.090423	1.101106	1.110833	1.123479	1.139363	1.14955	1.155857	
2.742978	2.757794	2.770971	2.783876	2.801105	2.819701	2.837827	2.853536	
9.448013	9.625931	9.799239	9.983836	10.167984	10.415299	10.654544	10.873155	
1.6436	1.693683	1.742487	1.791712	1.847657	1.911725	1.968533	2.02068	
4.182322	4.2835	4.385028	4.490236	4.606657	4.731146	4.859601	4.988582	
0.923783	0.974209	0.969286	0.962393	0.946031	0.948237	0.947644	0.947971	
0.730541	0.732849	0.721046	0.756271	0.76623	0.797231	0.826028	0.854125	
0.005354	0.005582	0.004536	0.0045	0.004436	0.00443	0.004427	0.004429	
1.659679	1.71264	1.694868	1.723164	1.716697	1.749897	1.778099	1.806525	
3.068255	3.089454	3.110066	3.12747	3.146606	3.160369	3.169854	3.175927	
5.514531	5.641182	5.699663	5.72997	5.738228	5.762841	5.817252	5.808934	
23.292974	23.386147	23.540583	23.905855	24.117577	24.149462	24.186405	24.250278	
14.002671	14.086319	14.236699	14.529118	14.733919	14.807547	14.849573	14.918742	
4.678284	4.798646	4.921643	5.044435	5.174862	5.30275	5.428176	5.552189	
8.408213	8.762076	9.019649	9.242119	9.437005	9.669409	9.961679	10.155239	
35.515675	36.324162	37.252689	38.558804	39.66341	40.520123	41.417706	42.394588	
21.350399	21.879353	22.529406	23.43465	24.231188	24.845421	25.428965	26.0811	
38.985207	40.509098	40.145195	40.50676	40.182201	40.734673	41.12109	41.630909	
142.945847	148.533295	147.199051	148.524994	147.334793	149.360519	150.77742	152.646698	
0.030979	0.031969	0.031919	0.031778	0.031404	0.031481	0.031466	0.031472	
0.037137	0.038906	0.037655	0.037509	0.037065	0.036826	0.037412	0.037936	

16.85034	17.792124	18.77639	19.803455	20.888523	22.033731	23.238447	4.30%
1.024281	1.083046	1.142996	1.203898	1.266028	1.329414	1.394311	3.90%
15.826058	16.709078	17.633392	18.599556	19.622494	20.704317	21.844135	4.30%
407.30899	416.512512	421.275574	429.901276	430.786194	435.000732	441.025726	1.30%
12.900382	12.925392	12.963897	12.9887	13.022117	13.054326	13.090693	0.30%
9.12152	9.11416	9.11914	9.111186	9.104392	9.103582	9.102099	0.00%
6.752035	6.749551	6.765794	6.776754	6.787317	6.806729	6.819451	0.30%
12.424186	12.398248	12.37468	12.326197	12.282837	12.24594	12.220251	0.90%
10.262928	10.272996	10.296927	10.308232	10.322512	10.339833	10.356816	0.20%
10.202320	10.272330	10.230327	10.300232	10.322312	10.333033	10.050010	0.2070
23.03264	23.575785	24.16317	24.741995	25.344765	25.957985	26.586639	2.40%
16.285772	16.624136	16.996996	17.355772	17.719751	18.102095	18.485977	2.10%
12.05524	12.311113	12.61064	12.908945	13.21006	13.534899	13.850016	2.40%
22.18243	22.614279	23.064936	23.480001	23.905914	24.350544	24.818811	3.00%
18.323669	18.737841	19.192253	19.636009	20.090561	20.560329	21.034254	2.30%
6.234804	6.228444	6.239022	6.236158	6.228717	6.243093	6.259952	-0.30%
1.16083	1.164659	1.168078	1.171137	1.175117	1.178902	1.180964	1.50%
2.867295	2.879894	2.889828	2.900936	2.918678	2.917837	2.9159	1.10%
44.404755	44.0000	44 505700	44 070470	40 400000	40.444400	10 710505	4.000/
11.131763	11.36062	11.628798	11.879172	12.122866	12.414132	12.713696	1.80%
2.072572	2.124326	2.17716	2.230883	2.287114	2.344198	2.398488	3.60%
5.119335	5.252897	5.386297	5.525953	5.680582	5.801998	5.922069	3.20%
0.972539	1.004633	1.004092	1.005916	0.985602	1.000609	1.003479	1.20%
0.885199	0.915687	0.923735	0.960774	0.965077	0.967595	0.991825	1.30%
0.004547	0.004709	0.004694	0.004684	0.004626	0.004683	0.004709	-4.20%
1.862285	1.925029	1.932521	1.971374	1.955305	1.972887	2.000012	1.20%
3.184159	3.19433	3.204642	3.218147	3.228226	3.24101	3.255359	0.20%
5.856686	5.894825	5.914473	5.931929	5.97398	6.034529	6.102457	1.50%
24.338148	24.446487	24.607658	24.906672	25.025965	25.134474	25.389404	2.30%
14.981933	15.0601	15.196974	15.439444	15.594992	15.707885	15.968205	2.10%
5.685071	5.826425	5.973073	6.130203	6.283051	6.444614	6.611495	2.30%
10.456663	10.752103	11.023877	11.299649	11.627075	11.999411	12.39383	3.70%
43.453896	44.590145	45.865761	47.444374	48.707687	49.978855	51.5648	4.40%
26.74909	27.469471	28.325359	29.410381	30.352314	31.234476	32.430748	4.20%
42 0E0017	44 224052	44 202010	4E 027050	44 500030	44 005003	4E 474003	1 200/
42.858017 157.146179	44.224953	44.393818	45.037056	44.508839	44.995003	45.474083	1.20%
0.031821	162.158173	162.777374 0.032503	165.135956 0.03258	163.199036	164.981781	166.738388	1.20%
	0.032425				0.032436	0.032465	-0.70%
0.039427	0.040356	0.040489	0.041113	0.040194	0.040468	0.040929	0.40%

Mercury (short tons)

Electricity: Emissions: Mercury: Reference case without Clean Power Plan

62-AEO2017.155.ref_no_cpp-d120816a

st 1.562344 0.289828 0.196159 0.211415 0.247486

 $0.310738 \qquad 0.31234 \qquad 0.329727 \qquad 0.334521 \qquad 0.363602 \qquad 0.357975 \qquad 0.35643 \qquad 0.360397$

0.377991 0.380299 0.36402 0.354276 0.341753 0.335165 0.348121 0.34475

0.70%